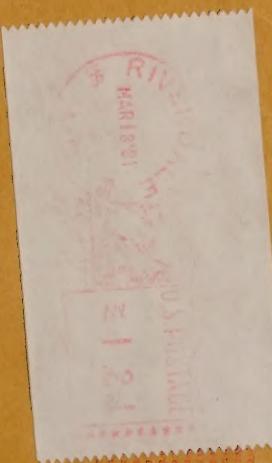


FIRST CLASS

HUGH F. TAYLOR SCHOLARSHIPS
DIRECTOR: 6903 RHODE ISLAND AVE.
COLLEGE PARK, MD 20740
College Park, MD 20740, U.S.A.
6903 RHODE ISLAND AVE.
COLLEGE PARK, MD 20740

IEEE
300,000
STRONG
AWARD WINNING

JOHN ROGERS KK6DJ
QAL POW Amateurs Radio Club
UW Box 53
Sauk City, WI 53407





RETURN ADDRESS

Name _____

Address _____

City _____ State _____ Zip _____

F. A. R. Scholarships
6903 Rhode Island Ave,
College Park, Md. 20740

The Foundation For Amateur Radio



Washington, DC

SCHOLARSHIP AWARD REGULATIONS 1991 - 1992

The Foundation for Amateur Radio, Inc., intends to award thirty six (36) scholarships for the coming academic year, ranging from \$500 to \$2000 each. Unless otherwise indicated, all Radio Amateurs holding a license of at least FCC GENERAL Class and meeting the specific requirements listed below can compete for one or more of the awards if they are now enrolled or have been accepted for enrollment in an accredited university, college or technical school to pursue a full-time course of studies. Applicants are encouraged to apply for all of the awards for which they feel eligible.

1. The **John W. Gore Memorial Scholarship** pays \$1000. Applicants must intend to pursue studies in electronics or a related science and have completed at least one year toward a baccalaureate degree. Preference will be given to residents of the District of Columbia, Maryland and Northern Virginia.
2. The **Richard G. Chichester Memorial Scholarship** pays \$900. Applicants must be a member of the ARRL and be recommended by an ARRL-affiliated club (they need not be a member of the club). There is no restriction on the course of study, but applicants must intend to seek a baccalaureate degree. Preference will be given to residents of Ohio, Kentucky, Indiana, Illinois, Iowa, the District of Columbia, Maryland and Northern Virginia.
3. The **Edwin S. Van Deusen Memorial Scholarship** pays \$750. Applicants must intend to seek an Associate degree in a science related area. Residence preference is the same as the Gore Scholarship.
4. There are three (3) **Radio Club of America Scholarships**. The first, from the **Leo Meyerson Fund**, pays \$500; the second, **In Memory of J. Alan Biggs, K4AA**, pays \$650; and the third, **In Memory of Jack Poppele**, pays \$750. Applicants must intend to pursue studies in electronics engineering or technology toward at least an Associate degree and be residents of the U.S.A. or its territories.
5. The seven (7) **Quarter Century Wireless Association Scholarships** pay \$750 each. There is no restriction on the course of study, but applicants must intend to seek at least an Associate degree. Non-U.S. applicants must hold an FCC GENERAL CLASS or EQUIVALENT foreign authorization. Those seeking post graduate degrees are also eligible. There is no residence area preference; however, applicants must be recommended by a member of QCWA. Four of these awards are designated as Quarter Century Wireless Association Memorial Scholarships. The other three awards are specifically designated as the **QCWA Robert S. Cresap Memorial Scholarship**, the **QCWA Leo Meyerson Family Living Scholarship**, and the **QCWA Cresson F. Donbar Scholarship**.
6. The **Young Ladies' Radio League Scholarship** pays \$1200. Applicants must hold at least an FCC TECHNICIAN CLASS or EQUIVALENT foreign authorization and intend to seek a baccalaureate degree from an institution of higher learning in the United States. Preference will be given to female applicants studying communications and electronics or related arts and sciences.

7. **The Edmund B. Redington Memorial Scholarship** pays \$500. The requirements are the same as those for the Radio Club of America Scholarship (see 4 above).

8. The two (2) **Amateur Radio News Service Scholarships** pay \$600 each. There is no restriction on the course of study, but preference will be given to applicants pursuing studies leading to a degree in journalism. Applicants must intend to seek a baccalaureate degree and be residents of the U.S.A. or its territories.

9. **The Columbia Amateur Radio Association, Inc., Scholarship** pays \$1000. Applicants must be residents of the state of Maryland, seek a baccalaureate degree and hold an Amateur Radio license of TECHNICIAN CLASS or higher. There is no restriction on the course of study.

10. The three (3) **Baltimore Amateur Radio Club Scholarships** pay \$1000 each. Applicants must be residents of the state of Maryland and hold an Amateur Radio license of NOVICE CLASS or higher. There is no restriction on the course of study. Preference will be given to those who have successfully completed two years of college.

11. The two (2) **Tropical Hambooree Scholarships** sponsored by the Dade Radio Club of Miami, Florida pay \$1000 each. Applicants must be residents of the state of Florida. There is no restriction on the course of study; however, preference will be given to those studying electronics or science-related fields.

12. **The Rose Ellen Bills Memorial Scholarship** pays \$2000. There is no restriction on the course of study. Applicants must be residents of the U.S.A. or its territories and intend to seek a baccalaureate degree.

13. **The Victor C. Clark Memorial Scholarship**, sponsored by the Vienna Wireless Society, pays \$1000. Applicants must have completed at least one year toward a baccalaureate degree, be residents of the state of Virginia and members of the ARRL. Preference will be given to residents of Northern Virginia; individuals who have performed volunteer, civic or public service activities will be given additional consideration. There are no restrictions on the course of study.

14. **The Frederick Amateur Radio Club Scholarship** pays \$1000. Applicants must intend to seek a degree and hold an Amateur Radio license of ANY CLASS. There is no restriction on the course of study; preference will be given to a resident of Frederick County, Maryland.

15. The two (2) **10-10 International Net, Inc., Scholarships** pay \$750 each. Applicants must be radio amateurs holding at least a NOVICE CLASS license or EQUIVALENT foreign authorization. There is no restriction on the course of study, but applicants must intend to seek at least an Associate degree from a college or university in the United States. Preference will be given to those seeking a graduate degree. Further, they must provide a written recommendation from a member of the 10-10 International Net.

16. The three (3) **WARAC Memorial Scholarship**, which pay \$500 each, are sponsored by the West Allis Radio Amateur Club, Inc., of Milwaukee, Wisconsin. Applicants must be residents of the state of Wisconsin and hold an Amateur Radio license of TECHNICIAN CLASS or higher. They must be enrolled or accepted in a college, university or technical school in Wisconsin and seek at least an Associate degree.

17. The **Kevin Barry Perdue Memorial Scholarship**, sponsored by Kay Craigie, KC3LM and Carter Craigie, KD3AO, pays \$1000. There is no restriction on the course of study, but preference will be given to applicants who intend to study in a liberal arts, humanities or social science field. Applicant must intend to seek a baccalaureate degree in a U.S. institution, hold at least a TECHNICIAN Class license and be a resident of the U.S. or its territories.

18. The four (4) **South Milwaukee Amateur Radio Club Scholarships** pay \$500 each. Applicants must hold at least a Novice class license and intend to seek an Associate or Baccalaureate degree in Electrical Engineering or technology from a college or university in the U.S. They may reside in Wisconsin, Illinois or Indiana, with preference given to Wisconsin residents.

ADDITIONAL INFORMATION FOR THE APPLICANT

Residence preference listed for the awards listed under Items 1, 2, 3, 14, 16 and 18 means that when the qualifications of applicants are essentially equal, the applicant meeting the residence preference will be chosen. In recent years several of these awards have been given to residents of other areas.

All questions on the application must be answered completely. Feel free to use annotated addendum sheets to explain your responses more fully. These awards are based on a combination of need, scholastic achievement, contributions to Amateur Radio, extra curricular activities and community involvement. The single application form is used for all of the awards offered. See Item 43 of the application. The submission of transcripts is optional; they may, however, be provided as supplemental information. Attention is directed to Item 45 of the application. Since we do check references, please be sure that their home phone numbers (including area codes) and complete addresses are correct.

It is suggested that any applicant unable to provide a needed recommendation, after a reasonable effort, contact FAR Scholarships.

This application, which consists of six (6) pages must be SIGNED AND RECEIVED PRIOR TO JUNE 30, 1991. The decisions of the Awards Committee, upon acceptance by the Foundation's Trustees, are final.

**PLEASE READ CAREFULLY
THE INSTRUCTIONS (4 pages) AND APPLICATION (6 pages)**

SUMMARY-AID

AWARD	NR	AMOUNT	MINIMUM LICENSE	RESIDENCE	COURSE REQUIREMENT	DEGREE	SPECIAL REQIUREMENT
Gore	1	\$1000	General	P	T	B	T
Chichester	1	900	General	P	None	B	T
VanDeusen	1	750	General	P	T	A	
RCA	3	T	General	U	T	A-B	
QCWA	7	750	General	None	None	A-B-G	T
YLRL	1	1200	Technician	None	T	B	P
Redington	1	500	General	U	T	A-B	
ARNS	2	600	General	U	P	B	
CARA	1	1000	Technician	MD	None	B	
BARC	3	1000	Novice	MD	None	B	P
Tropical	2	1000	Technician	FL	T	B	
R.E. Bills	1	2000	General	U	None	B	
V.C. Clark	1	1000	General	VA	None	B	P
Frederick	1	1000	Novice	P	None	A-B	
10-10	2	750	Novice	None	None	A-B-G	P
WARAC	3	500	Technician	WI	None	A-B	
K. Perdue	1	1000	Technician	U	T	B	
S Milwaukee	4	500	Novice	P	T	A-B	

P - Preference, see text

T - See text

U - Resident of U.S. or territories

A - Associate Degree

B - Baccalaureate Degree

G - Graduate Degree

This Summary-Aid is for use with the 1991-1992 Award Regulations

The Foundation For Amateur Radio



Washington, D.C.

SCHOLARSHIP AWARD REGULATIONS 1991 – 1992

The Foundation for Amateur Radio, Inc., intends to award thirty six (36) scholarships for the coming academic year, ranging from \$500 to \$2000 each. Unless otherwise indicated, all Radio Amateurs holding a license of at least FCC GENERAL Class and meeting the specific requirements listed below can compete for one or more of the awards if they are now enrolled or have been accepted for enrollment in an accredited university, college or technical school to pursue a full-time course of studies. Applicants are encouraged to apply for all of the awards for which they feel eligible.

1. **The John W. Gore Memorial Scholarship** pays \$1000. Applicants must intend to pursue studies in electronics or a related science and have completed at least one year toward a baccalaureate degree. Preference will be given to residents of the District of Columbia, Maryland and Northern Virginia.
2. **The Richard G. Chichester Memorial Scholarship** pays \$900. Applicants must be a member of the ARRL and be recommended by an ARRL-affiliated club (they need not be a member of the club). There is no restriction on the course of study, but applicants must intend to seek a baccalaureate degree. Preference will be given to residents of Ohio, Kentucky, Indiana, Illinois, Iowa, the District of Columbia, Maryland and Northern Virginia.
3. **The Edwin S. Van Deusen Memorial Scholarship** pays \$750. Applicants must intend to seek an Associate degree in a science related area. Residence preference is the same as the Gore Scholarship.
4. There are three (3) **Radio Club of America Scholarships**. The first, from the **Leo Meyerson Fund**, pays \$500; the second, **In Memory of J. Alan Biggs, K4AA**, pays \$650; and the third, **In Memory of Jack Poppele**, pays \$750. Applicants must intend to pursue studies in electronics engineering or technology toward at least an Associate degree and be residents of the U.S.A. or its territories.
5. The seven (7) **Quarter Century Wireless Association Scholarships** pay \$750 each. There is no restriction on the course of study, but applicants must intend to seek at least an Associate degree. Non-U.S. applicants must hold an FCC GENERAL CLASS or EQUIVALENT foreign authorization. Those seeking post graduate degrees are also eligible. There is no residence area preference; however, applicants must be recommended by a member of QCWA. Four of these awards are designated as Quarter Century Wireless Association Memorial Scholarships. The other three awards are specifically designated as the **QCWA Robert S. Cresap Memorial Scholarship**, the **QCWA Leo Meyerson Family Living Scholarship**, and the **QCWA Cresson F. Donbar Scholarship**.
6. **The Young Ladies' Radio League Scholarship** pays \$1200. Applicants must hold at least an FCC TECHNICIAN CLASS or EQUIVALENT foreign authorization and intend to seek a baccalaureate degree from an institution of higher learning in the United States. Preference will be given to female applicants studying communications and electronics or related arts and sciences.

7. **The Edmund B. Redington Memorial Scholarship** pays \$500. The requirements are the same as those for the Radio Club of America Scholarship (see 4 above).

8. The two (2) **Amateur Radio News Service Scholarships** pay \$600 each. There is no restriction on the course of study, but preference will be given to applicants pursuing studies leading to a degree in journalism. Applicants must intend to seek a baccalaureate degree and be residents of the U.S.A. or its territories.

9. **The Columbia Amateur Radio Association, Inc., Scholarship** pays \$1000. Applicants must be residents of the state of Maryland, seek a baccalaureate degree and hold an Amateur Radio license of TECHNICIAN CLASS or higher. There is no restriction on the course of study.

10. The three (3) **Baltimore Amateur Radio Club Scholarships** pay \$1000 each. Applicants must be residents of the state of Maryland and hold an Amateur Radio license of NOVICE CLASS or higher. There is no restriction on the course of study. Preference will be given to those who have successfully completed two years of college.

11. The two (2) **Tropical Hambooree Scholarships** sponsored by the Dade Radio Club of Miami, Florida pay \$1000 each. Applicants must be residents of the state of Florida. There is no restriction on the course of study; however, preference will be given to those studying electronics or science-related fields.

12. **The Rose Ellen Bills Memorial Scholarship** pays \$2000. There is no restriction on the course of study. Applicants must be residents of the U.S.A. or its territories and intend to seek a baccalaureate degree.

13. **The Victor C. Clark Memorial Scholarship**, sponsored by the Vienna Wireless Society, pays \$1000. Applicants must have completed at least one year toward a baccalaureate degree, be residents of the state of Virginia and members of the ARRL. Preference will be given to residents of Northern Virginia; individuals who have performed volunteer, civic or public service activities will be given additional consideration. There are no restrictions on the course of study.

14. **The Frederick Amateur Radio Club Scholarship** pays \$1000. Applicants must intend to seek a degree and hold an Amateur Radio license of ANY CLASS. There is no restriction on the course of study; preference will be given to a resident of Frederick County, Maryland.

15. The two (2) **10-10 International Net, Inc., Scholarships** pay \$750 each. Applicants must be radio amateurs holding at least a NOVICE CLASS license or EQUIVALENT foreign authorization. There is no restriction on the course of study, but applicants must intend to seek at least an Associate degree from a college or university in the United States. Preference will be given to those seeking a graduate degree. Further, they must provide a written recommendation from a member of the 10-10 International Net.

16. The three (3) **WARAC Memorial Scholarship**, which pay \$500 each, are sponsored by the West Allis Radio Amateur Club, Inc., of Milwaukee, Wisconsin. Applicants must be residents of the state of Wisconsin and hold an Amateur Radio license of TECHNICIAN CLASS or higher. They must be enrolled or accepted in a college, university or technical school in Wisconsin and seek at least an Associate degree.

17. The **Kevin Barry Perdue Memorial Scholarship**, sponsored by Kay Craigie, KC3LM and Carter Craigie, KD3AO, pays \$1000. There is no restriction on the course of study, but preference will be given to applicants who intend to study in a liberal arts, humanities or social science field. Applicant must intend to seek a baccalaureate degree in a U.S. institution, hold at least a TECHNICIAN Class license and be a resident of the U.S. or its territories.

18. The four (4) **South Milwaukee Amateur Radio Club Scholarships** pay \$500 each. Applicants must hold at least a Novice class license and intend to seek an Associate or Baccalaureate degree in Electrical Engineering or technology from a college or university in the U.S. They may reside in Wisconsin, Illinois or Indiana, with preference given to Wisconsin residents.

ADDITIONAL INFORMATION FOR THE APPLICANT

Residence preference listed for the awards listed under Items 1, 2, 3, 14, 16 and 18 means that when the qualifications of applicants are essentially equal, the applicant meeting the residence preference will be chosen. In recent years several of these awards have been given to residents of other areas.

All questions on the application must be answered completely. Feel free to use annotated addendum sheets to explain your responses more fully. These awards are based on a combination of need, scholastic achievement, contributions to Amateur Radio, extra curricular activities and community involvement. The single application form is used for all of the awards offered. See Item 43 of the application. The submission of transcripts is optional; they may, however, be provided as supplemental information. Attention is directed to Item 45 of the application. Since we do check references, please be sure that their home phone numbers (including area codes) and complete addresses are correct.

It is suggested that any applicant unable to provide a needed recommendation, after a reasonable effort, contact FAR Scholarships.

This application, which consists of six (6) pages must be SIGNED AND RECEIVED PRIOR TO JUNE 30, 1991. The decisions of the Awards Committee, upon acceptance by the Foundation's Trustees, are final.

PLEASE READ CAREFULLY
THE INSTRUCTIONS (4 pages) AND APPLICATION (6 pages)

SUMMARY-AID

AWARD	NR	AMOUNT	MINIMUM LICENSE	RESIDENCE	COURSE REQUIREMENT	DEGREE	SPECIAL REQIUREMENT
Gore	1	\$1000	General	P	T	B	T
Chichester	1	900	General	P	None	B	
VanDeusen	1	750	General	P	T	A	
RCA	3	T	General	U	T	A-B	
QCWA	7	750	General	None	None	A-B-G	T
YRL	1	1200	Technician	None	T	B	P
Redington	1	500	General	U	T	A-B	
ARNS	2	600	General	U	P	B	
CARA	1	1000	Technician	MD	None	B	
BARC	3	1000	Novice	MD	None	B	P
Tropical	2	1000	Technician	FL	T	B	
R.E. Bills	1	2000	General	U	None	B	
V.C. Clark	1	1000	General	VA	None	B	P
Frederick	1	1000	Novice	P	None	A-B	
10-10	2	750	Novice	None	None	A-B-G	P
WARAC	3	500	Technician	WI	None	A-B	
K. Perdue	1	1000	Technician	U	T	B	
S Milwaukee	4	500	Novice	P	T	A-B	

P - Preference, see text

T - See text

U - Resident of U.S. or territories

A - Associate Degree

B - Baccalaureate Degree

G - Graduate Degree

This Summary-Aid is for use with the 1991-1992 Award Regulations

13. Do you have a car of your own? Yes Year and Make : 1985 Ford Lynx

14. Are there any other need factors that you feel we should be aware of?

15. Do you have physical disabilities? No If yes, describe: _____

16. What High School did you attend? _____
Location: _____ Date Graduated: _____
Class Rank and Size: _____ Grade Point Average _____

17. Are you now attending a college or technical school? _____
Name: _____
Location: _____

18. At which school have you been accepted and plan to attend? _____

Location: _____

19. College Entrance Scores; (Type and Subjects) SAT Verbal _____
SAT Math _____ Other _____

20. List other schools or universities attended, degrees earned and dates attended.

21. Indicate grade point average (GPA) for each year beyond high school 1 2 3 4

If GPA is based on other than 4.0, explain: _____

22. Have you been on the Dean's List or similar honor list? _____
Number of Semesters or Quarters: _____

23. What percentage of your advanced education expenses are to be paid by:
Your family _____% yourself _____% scholarship or grant _____% loans _____%

24. Are you presently or will you be the beneficiary of any other scholarship or grants? _____ Donor(s) _____ Amount this year _____

25. What do you estimate your total schooling costs to be in the next school year?
Total costs: _____ Tuition: _____ Room and Board: _____
Books and supplies _____ Other (explain) _____

26. What is your major field of study? _____

What is your minor if any? _____

27. What degree do you expect to receive from your present course of studies?

28. Why have you selected this field of study? _____

29. What would you like most to do as a life's work? _____

30. Why do you feel a need for this scholarship? _____

31. Date of first Amateur license _____

List current Amateur and commercial license(s)

Type	Class	First Issue Date	Expiration Date
------	-------	------------------	-----------------

Other Licensed Amateurs in your family: _____

32. Are you operating at present? _____ If yes, what modes and bands? _____

33. Are you a member of: ARRL? _____ ARES? _____ RACES? _____ MARS: _____

34. List any radio club(s) you are or have been a member of and any offices held:

35. What equipment do you own? _____

36. What equipment have you constructed? _____

37. What aspects of ham radio interest you most and how active are you in them?

38. What do you feel, as an Amateur, you can contribute to the betterment of Amateur Radio? _____

39. List your other hobbies and activities: _____

40. List past and present employment:

Firm Name and Address

Nature of Work

Dates

From/to

Hours/Week

41. List school, scholarship, and civic awards you have received:

42. List any other activities in which you are involved:

43. Review the Award Regulations and check the scholarship(s) for which you believe you are eligible:

John W. Gore Memorial	—
Radio Club of America	—
* Richard G. Chichester Memorial	—
* QCWA Scholarships	—
* 10-10 International Net	—
Edwin S. Van Deusen Memorial	—
Frederick Amateur Radio Club	—
Amateur Radio News Svc.	—
Young Ladies' Radio League	—
Columbia Amateur Radio Assn.	—
Edmund B. Redington Memorial	—
Tropical Hamboree	—
Baltimore Amateur Radio Club	—
West Allis Radio Amateur	—
Vienna Wireless Society	—
Rose Ellen Bills Memorial	—
Kevin B. Perdue Memorial	—
S. Milwaukee Amateur Radio Club	—

* Scholarships requiring recommendation of affiliated club or member.
Sponsor should **NOT** be yourself or anyone related to you.

44. Recommendations:

(a) For the Chichester Scholarship:

We know and recommend the applicant.

Name of ARRL-affiliated Radio Club

Signature, call sign, and Club office

(b) For the Quarter Century Wireless Association Scholarships:

The above applicant is recommended by

Signature of QCWA Member, call sign, QCWA Membership #

(c) For the 10-10 International Net Scholarships:

The above applicant is recommended by

Signature of 10-10 Member, call sign and 10-10 #

45. List name, Home address and Home Phone number for the following references who are **NOT** related to you:

ACADEMIC Reference _____

(Name)

_____ (Home Address)

_____ (Home Phone #)

CHARACTER Reference _____

(Name)

_____ (Home Address)

_____ (Home Phone #)

NEIGHBORHOOD Reference _____

(Name)

_____ (Home Address)

_____ (Home Phone #)

The information contained in this application is true and correct to the best of my knowledge.

Signed: _____ Call _____

Date _____

Please indicate how you learned about our scholarship program:

QST CQ 73 Worldradio W5YI Westlink

QCWA Member 10-10 Net Member Radio Club Club Newsletter

Other _____

The Foundation For Amateur Radio



Washington, DC

1991

SCHOLARSHIP APPLICATION

(Please Type or Print in Ink)

1. Name: _____ Call: _____ Age: _____
2. Birthplace: _____ Date of Birth: _____
3. Residence: _____
_____ Phone () _____
4. Mailing Address _____
_____ Phone () _____
5. Parent's Home: Rented _____ Owned _____ Being Purchased _____
Location: _____
6. Are both parents living? _____
7. Father's Occupation: _____
8. Mother's Occupation _____
9. Combined Gross Annual Income of Parents (from tax returns) _____
10. List Brothers and Sisters:

Age	Did not attend college	Previously attended college	Currently attending college	Name of College
11. Does your family own a car(s)? _____ Year(s) and Make(s) _____
12. If you are financially independent and/or married,
 - (a) Marital Status: Single _____ Married _____ Separated or Divorced _____
 - (b) Gross annual income (combined if married and spouse employed) _____
 - (c) Spouse's Occupation _____
 - (d) List ages of any dependent children: _____

13. Do you have a car of your own? _____ Year and Make : _____

14. Are there any other need factors that you feel we should be aware of?

15. Do you have physical disabilities? _____ If yes, describe: _____

16. What High School did you attend? _____
Location: _____ Date Graduated: _____
Class Rank and Size: _____ Grade Point Average _____

17. Are you now attending a college or technical school? _____
Name: _____
Location: _____

18. At which school have you been accepted and plan to attend? _____
Location: _____

19. College Entrance Scores; (Type and Subjects) SAT Verbal _____
SAT Math _____ Other _____

20. List other schools or universities attended, degrees earned and dates attended.

21. Indicate grade point average (GPA) 1 2 3 4
for each year beyond high school ____ ____ ____ ____
If GPA is based on other than 4.0, explain: _____

22. Have you been on the Dean's List or similar honor list? _____
Number of Semesters or Quarters: _____

23. What percentage of your advanced education expenses are to be paid by:
Your family ____ % yourself ____ % scholarship or grant ____ % loans ____ %

24. Are you presently or will you be the beneficiary of any other scholarship or
grants? _____ Donor(s) _____ Amount this year _____

25. What do you estimate your total schooling costs to be in the next school year?
Total costs: _____ Tuition: _____ Room and Board: _____
Books and supplies _____ Other (explain) _____

26. What is your major field of study? _____

What is your minor if any? _____

27. What degree do you expect to receive from your present course of studies?

28. Why have you selected this field of study? _____

29. What would you like most to do as a life's work? _____

30. Why do you feel a need for this scholarship? _____

31. Date of first Amateur license _____

List current Amateur and commercial license(s)

Type	Class	First Issue Date	Expiration Date
------	-------	------------------	-----------------

Other Licensed Amateurs in your family: _____

32. Are you operating at present? _____ If yes, what modes and bands? _____

33. Are you a member of: ARRL? ____ ARES? ____ RACES? ____ MARS: ____

34. List any radio club(s) you are or have been a member of and any offices held:

35. What equipment do you own? _____

36. What equipment have you constructed? _____

37. What aspects of ham radio interest you most and how active are you in them?

38. What do you feel, as an Amateur, you can contribute to the betterment of

Amateur Radio? _____

39. List your other hobbies and activities: _____

40. List past and present employment:

Firm Name and Address

Nature of Work

Dates

From/to

Hours/Week

41. List school, scholarship, and civic awards you have received:

42. List any other activities in which you are involved:

43. Review the Award Regulations and check the scholarship(s) for which you believe you are eligible:

John W. Gore Memorial	—
Radio Club of America	—
* Richard G. Chichester Memorial	—
* QCWA Scholarships	—
* 10-10 International Net	—
Edwin S. Van Deusen Memorial	—
Frederick Amateur Radio Club	—
Amateur Radio News Svc.	—
Young Ladies' Radio League	—
Columbia Amateur Radio Assn.	—
Edmund B. Redington Memorial	—
Tropical Hamboree	—
Baltimore Amateur Radio Club	—
West Allis Radio Amateur	—
Vienna Wireless Society	—
Rose Ellen Bills Memorial	—
Kevin B. Perdue Memorial	—
S. Milwaukee Amateur Radio Club	—

* Scholarships requiring recommendation of affiliated club or member.
Sponsor should **NOT** be yourself or anyone related to you.

44. Recommendations:

(a) For the Chichester Scholarship:
We know and recommend the applicant.

Name of ARRL-affiliated Radio Club

Signature, call sign, and Club office

(b) For the Quarter Century Wireless Association Scholarships:
The above applicant is recommended by

Signature of QCWA Member, call sign, QCWA Membership #

(c) For the 10-10 International Net Scholarships:
The above applicant is recommended by

Signature of 10-10 Member, call sign and 10-10 #

45. List name, Home address and Home Phone number for the following references who are **NOT** related to you:

ACADEMIC Reference _____
(Name)

(Home Address)

(Home Phone #)

CHARACTER Reference _____
(Name)

(Home Address)

(Home Phone #)

NEIGHBORHOOD Reference _____
(Name)

(Home Address)

(Home Phone #)

The information contained in this application is true and correct to the best of my knowledge.

Signed: _____ Call _____

Date _____

Please indicate how you learned about our scholarship program:

QST ____ CQ ____ 73 ____ Worldradio ____ W5YI ____ Westlink ____

QCWA Member ____ 10-10 Net Member ____ Radio Club ____ Club Newsletter ____

Other _____

The Foundation For Amateur Radio



Washington, D.C.

FAR Scholarships
6903 Rhode Island Avenue
College Park, MD 20740
January 15, 1991

Dear Fellow Radio Amateur,

Thank you for your interest in the F.A.R scholarship program. A copy of the Award Regulations and a six page application form are enclosed with self-addressed envelope. All applicants will be notified of the results on or before August 20, 1991.

Your completed application must be received prior to June 30th; please wait until you have received your grades for this academic year so they will be reflected in the answers to the questions regarding grade point average. A transcript may be included, but it is not required. It is suggested that the award regulations and application be read carefully. The application, which must be filled out completely, will suffice for all of the awards for which you may be eligible.

Your comments regarding this program, or any perceived restrictions which might prevent your filing an application, would be most appreciated. We believe that efforts by radio amateurs to pursue additional education in their chosen fields are worthy of our interest and support.

73,

A handwritten signature in black ink, appearing to read "Hugh A. Turnbull".

Hugh A. Turnbull, W3ABC
Chairman, Scholarship Committee

The Foundation For Amateur Radio



Washington, DC

FAR Scholarships
6903 Rhode Island Avenue
College Park, MD 20740
January 15, 1991

Dear Fellow Radio Amateur,

Thank you for your interest in the F.A.R scholarship program. A copy of the Award Regulations and a six page application form are enclosed with self-addressed envelope. All applicants will be notified of the results on or before August 20, 1991.

Your completed application must be received prior to June 30th; please wait until you have received your grades for this academic year so they will be reflected in the answers to the questions regarding grade point average. A transcript may be included, but it is not required. It is suggested that the award regulations and application be read carefully. The application, which must be filled out completely, will suffice for all of the awards for which you may be eligible.

Your comments regarding this program, or any perceived restrictions which might prevent your filing an application, would be most appreciated. We believe that efforts by radio amateurs to pursue additional education in their chosen fields are worthy of our interest and support.

73,

A handwritten signature in black ink, appearing to read "Hugh A. Turnbull".

Hugh A. Turnbull, W3ABC
Chairman, Scholarship Committee

THE AMERICAN RADIO RELAY LEAGUE

225 Main Street
NEWINGTON, CT 06111

First Class Mail

DO NOT BEND

CPARC W6BHZ, W6BHZ
UU Box 53
Cal Poly Univ
San Luis Obispo, CA 93407

DO NOT BEND



First Class Mail



THE AMERICAN RADIO RELAY LEAGUE

SWEEEPSTAKES AWARD

This Certifies That Station

W6BHZ

(KC6s CEX, IZR, QOQ, WOT, KD6CVS, KE6SYA, KO6GA, N6NL, ops)

Has Achieved

FIRST PLACE, MULTIOOPERATOR, PHONE
SANTA BARBARA SECTION

In The

1995 ARRL NOVEMBER SWEEEPSTAKES

PRESIDENT, ARRL

Donald J. Stoffel K6ZV



THE AMERICAN RADIO RELAY LEAGUE
225 Main Street
NEWINGTON, CT 06111

DO NOT BEND

FIRST CLASS MAIL

CPARC W6BHZ, W6BHZ
UU Box 53
Cal Poly Univ
San Luis Obispo, CA 93407

DO NOT BEND

FIRST CLASS MAIL

THE AMERICAN RADIO RELAY LEAGUE

SUPERSTAKES RUMBLE

This Certifies That Station

WB6BHZ

(N6s DE, ED, NL, ops)

Has Achieved

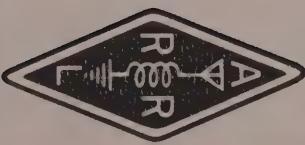
**FIRST PLACE, MULTIOPERATOR, CW
SANTA BARBARA SECTION**

In The

1996 ARRL NOVEMBER SWEEPSTAKES

Rodney J. Stapp K6EZ
PRESIDENT, ARRL

PRESIDENT/ARRL



FIRST CLASS MAIL

THE AMERICAN RADIO RELAY LEAGUE

SWEEEPSTAKES AWARD

This Certifies That Station

W6BHZ

(KC6WOT,KD6CVS,KE6SYA,N6s DE,ED,ops)

Has Achieved

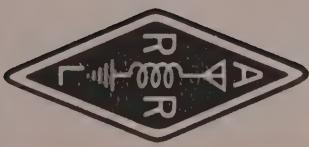
FIRST PLACE, MULTIOPERATOR, PHONE
SANTA BARBARA SECTION

In The

1996 ARRL NOVEMBER SWEEEPSTAKES

PRESIDENT, ARRL

John J. Stapp K6ZV



ARRL ENDING SIGNALS

Use

<i>Meaning</i>	<i>Phone</i>	<i>C W</i>	<i>AR</i>	<i>Use</i>
End of transmission	Over			After call to a specific station, before contact has been established.
End of formal message	End of message			Examples: Phone — W6ABC from W9LMN, over.
Invitation to transmit (any station)	Go (ahead)	AR		C W — W6ABC DE W9LMN AR
Invitation to transmit (specific station, <i>only</i>)	...only, Go	K		After transmission of a radiogram, following the signature.
End of contact	Clear	KN		At the end of any transmission when only the specific station called or being contacted is invited to answer.
Closing station	Clear and leaving the air	SK	CL	At the end of a QSO. On c w, SK W8LMN DE W5BCD. On phone, W8LMN this is W5BCD clear. When going off the air to indicate no calls will be listened for or answered. On phone, W7HIJ this is W2JKL, clear and leaving the air. On c w, W7HIJ DE W2JKL CL

TIME CONVERSION CHART

UTC	EDT/AST	CDT/EST	MDT/CST	PDT/MST	PST
0000*	2000	1900	1800	1700	1600
0100	2100	2000	1900	1800	1700
0200	2200	2100	2000	1900	1800
0300	2300	2200	2100	2000	1900
0400	0000*	2300	2200	2100	2000
0500	0100	0000*	2300	2200	2100
0600	0200	0100	0000*	2300	2200
0700	0300	0200	0100	0000*	2300
0800	0400	0300	0200	0100	0000*
0900	0500	0400	0300	0200	0100
1000	0600	0500	0400	0300	0200
1100	0700	0600	0500	0400	0300
1200	0800	0700	0600	0500	0400
1300	0900	0800	0700	0600	0500
1400	1000	0900	0800	0700	0600
1500	1100	1000	0900	0800	0700
1600	1200	1100	1000	0900	0800
1700	1300	1200	1100	1000	0900
1800	1400	1300	1200	1100	1000
1900	1500	1400	1300	1200	1100
2000	1600	1500	1400	1300	1200
2100	1700	1600	1500	1400	1300
2200	1800	1700	1600	1500	1400
2300*	1900	1800	1700	1600	1500
2400*	2000	1900	1800	1700	1600

Universal Coordinated Time (UTC) is the time at the zero or reference meridian. Time changes one hour with each change of 15° in longitude. The five time zones in the U.S. proper and Canada roughly follow these lines.

*0000 and 2400 are interchangeable. (2400 is associated with the date of the day ending 0000 with the day just starting.

ITU Phonetic Alphabet

Word list adopted by the International Telecommunication Union

A	ALFA
B	BRAGO
C	CHARLIE
D	DELTA
E	ECHO
F	FOXTROT
G	GOLF
H	HOTEL
I	INDIA
J	JULIETT
K	KILO
L	LIMA
M	MIKE
N	NOVEMBER
O	OSCAR
P	PAPA
Q	QUEBEC
R	ROMEO
S	SIERRA
T	TANGO
U	UNIFORM
V	VICTOR
W	WHISKEY
X	X-RAY
Y	YANKEE
Z	ZULU

C D - 220 (6-79)
The American Radio Relay League, Inc.
225 Main Street
Newington, Connecticut 06111

IN AN EMERGENCY

IN AN EMERGENCY Monitor your local emergency net frequency. Make contact with your local EC or RO. Take immediate steps to follow any prearranged plans.	Stay off the air unless or until you are sure you can be of assistance. In widespread emergencies, monitor WI A W for latest bulletins and news.
--	--

THE R-S-T SYSTEM

READABILITY

- 1 — Unreadable.
- 2 — Barely readable, occasional words distinguishable.
- 3 — Readable with considerable difficulty.
- 4 — Readable with practically no difficulty.
- 5 — Perfectly readable.

SIGNAL STRENGTH

- 1 — Faint signals, barely perceptible.
- 2 — Very weak signals.
- 3 — Weak signals.
- 4 — Fair signals.
- 5 — Fairly good signals.
- 6 — Good signals.
- 7 — Moderately strong signals.
- 8 — Strong signals.
- 9 — Extremely strong signals.

TONE

- 1 — Sixty cycle a.c. or less, very rough and broad.
- 2 — Very rough a.c. very harsh and broad.
- 3 — Rough a.c. tone, rectified but not filtered.
- 4 — Rough note, some trace of filtering.
- 5 — Filtered rectified a.c. but strongly ripple-modulated.
- 6 — Filtered tone, definite trace of ripple modulation.
- 7 — Near pure tone, trace of modulation.
- 8 — Near perfect tone, slight trace of modulation.
- 9 — Perfect tone, no trace of ripple or modulation of any kind.

If the signal has the characteristic steadiness of crystal control, add the letter X to the RST report. If there is a chirp, the letter C may be added to so indicate. Similarly for a click, add K. The above reporting system is used on both c w and voice, leaving out the "tone" report on voice. Turn card over for examples.

THE AMERICAN RADIO RELAY LEAGUE, INC.

NEWINGTON, CT 06111

This handy operating aid is actually five aids in one. It can be posted at your operating position, reverse side out, or can be separated into each of its five sections and posted separately or kept near your log. This is another service of ARRL to the amateur operating fraternity.

To All Radio Amateurs:

The list of "ending signals" on the reverse of this card has been arrived at after careful consideration of common and traditional usage versus need and common sense. This is the use recommended by ARRL, of the various ending signals given.

Whether you operate phone or cw (RTTY can use the cw abbreviations) there are times when, upon standing by, you will find it easier to indicate to anyone listening, who might want to "break in," just what the status is of the transmission he has just heard. Modern voice communication is "VOX" type and often requires no "ending signals," but voice equivalents of cw ending signals are included for convenience. Please help us popularize them.

American Radio Relay League, Inc.

THE AMERICAN RADIO RELAY LEAGUE, INC. Newington, Connecticut

To: All Radio Amateurs:

Signal reporting is a courtesy, not an FCC requirement. It is such a common courtesy that every amateur has a space for it in his log and on his QSL card. It is the information most sought in practically any QSO.

The system outlined on the reverse of this card has achieved universal acceptance among c.w. operators, and is being more and more widely used by voice operators.

Be honest! If there is something wrong with the signal of the other fellow, tell him so, because he wants to know, just as you want to know if there is something wrong with yours. Make your reports worthwhile, honest and informative. **Use the definitions!**

By cw: RST 359; RST 569X; RST 489C;
RST 579K.

By voice: I am receiving you Readability
... (1-5). Strength . . . (1-9).

Good Phone Operating

1. Listen much . . . with care. Avoid distractions in your operating room. Tune the band well after each call.
2. Time your calls; monitor your own frequency. Call only when a station is free.
3. Make short calls, with breaks to listen. Speak clearly at a steady, modest rate. Three short calls are better than one long one.
4. Use Vox or push-to-talk technique . . . speak near the mike. Watch the modulation indicator. Keep local background noise at a minimum
5. Make notes. Avoid missing points for comment. Jot down topics to avoid repeats.
6. Talk in connected thoughts and phrases. Notes will help avoid mixing up subjects. Vox and push-to-talk techniques will help brother amateurs from calling you a monologuist.
7. Speak naturally. QSOs need not be cut and dried. Make them interesting. Avoid exhibitionism. Use proper operating form to promote efficiency in communication and add respect and prestige for your station.

To: All Radio Amateurs.

A phonetic alphabet or special word list is recommended to use in identifying station calls or difficult words as necessary.

The list helps to avoid facetious word combinations. This gives it greatest acceptability to all amateurs.

Use of a standard list is recommended by ARRL. Haphazard selection of words often results in confusion. A degree of uniformity in use of phonetic words reflects favorably on your individual operating, and on the whole amateur service.

Some Facts about Time Conversion

The chart on the other side has been arranged to show time zones used by most amateurs in the North American Continent and Universal Coordinated Time, used universally as a standard. The advantage of UTC is that it is the universally understood reference throughout the world. ARRL recommends that all amateur logging be done in UTC.

All times shown are in 24-hour time for convenience. To convert to 12-hour time: for times between 0000 and 0059, change the first two ciphers to 12, insert a colon and add a.m.; for times between 0100 and 1159, insert a colon and add p.m.; for times between 1200 and 1259, insert a colon and add p.m.; for times between 1300 and 2400, subtract 12, insert a colon and add p.m.

Time zone letters may be used to identify the kind of time being used. For example, UTC is designated by the letter Z, EDT/AST by the letter Q, CDT/EST by R, MDT/CST by S, PDT/MST by T, PST by U; thus, 1200R would indicate noon in the CDT/EST zone, which would convert to 1700 UTC or 1700Z.

In converting from one time to another, be sure the day or date corresponds to new time. That is, 2000R (EST) on Jan. 1 would be 0200Z (UTC) on Jan. 2; similarly, 0400Z on Jan. 2 would be 2000U (PST) on Jan. 1.

A good method is to use UTC (Z) for all amateur logging, schedule-making, QSLing and other amateur work. Conversion, with all the different time zones, is inevitable. Leave your clock on UTC.

The Canadian Maritime provinces and Puerto Rico use AST (Q) time, or ADST (P) time. Canal Zone uses EST (R) time. Most of Alaska and Hawaii use W time (+ 10 to UTC).

THE AMERICAN RADIO RELAY LEAGUE, INC.

Newington, Connecticut

AMATEUR MESSAGE FORM

Every message originated and handled should contain the following component parts in the order given.

I PREAMBLE

- a. Number (begin with 1 each month or year)
- b. Precedence (R, W, P or EMERGENCY)
- c. Handling Instructions (optional, see text)
- d. Station of Origin (first amateur handler)
- e. Check (number of words/groups in text only)
- f. Place of Origin (not necessarily location of station of origin)
- g. Time Filed (optional with originating station)
- h. Date (must agree with date of time filed)

II ADDRESS (as complete as possible, include zip code and telephone number)

III TEXT (limit to 25 words or less, if possible)

IV SIGNATURE

CW MESSAGE EXAMPLE

I NR 1 R HXG W1AW 8 NEWINGTON CONN 1830Z July 1
a b c d e f g h
II DONALD R SMITH AA
164 EAST SIXTH AVE AA
NORTH RIVER CITY MO 00789 AA
733-3968 BT

III HAPPY BIRTHDAY X SEE YOU SOON X LOVE BT

IV DIANA AR

CW: Note that X, when used in the text as punctuation, counts as a word. The prosign AA separates the parts of the address. BT separates the address from the text and the text from the signature. AR marks end of message; this is followed by B if there is another message to follow, by N if this is the only or last message. It is customary to copy the preamble, parts of the address, text and signature on separate line.

RTTY: Same as cw procedure above, except (1) use extra space between parts of address, instead of AA; (2) omit cw procedure sign BT to separate text from address and signature, using line spaces instead; (3) add a CFM line under the signature, consisting of all names, numerals and unusual words in the message in the order transmitted.

PHONE: In general, use *prowords* in place of procedural signals or *prosigns*. The above message on phone would go something like this: "Message Follows number one, routine HX Golf, W1AW, eight, Newington, Connecticut, one eight thuhree zero zulu, July one, Donald Initial R Smith, Figures one six four, East Sixth Avenue, North River City, Missouri zero zero seven eight nine, Telephone sev-ven thuhree thuhree, thuhree niyen six eight. Break Happy Birthday X-ray see you soon X-ray love Break Diana, End of Message, Over." Speak in measured tones, emphasizing every syllable. Spell out phonetically all difficult or unusual words, but do *not* spell out common ones.

PRECEDENCES

The precedence will follow the message number. For example, on cw 207R or 207 EMERGENCY. On phone, "Two Zero Seven, Routine (or Emergency)."

EMERGENCY — Any message having life and death urgency to any person or group of persons, which is transmitted by Amateur Radio in the absence of regular commercial facilities. This includes official messages of welfare agencies during emergencies requesting supplies, materials or instructions vital to relief of stricken populace in emergency areas. During normal times, it will be *very rare*. On cw, this designation will *du x's* be spelled out. When in doubt, do *not* use it.

PRIORITY — Important messages having a specific time limit. Official messages not covered in the Emergency category. Press dispatches and other emergency-related traffic not of the utmost urgency. Notification of death or injury in a disaster area, personal or official. Use the abbreviation P on cw.

WELFARE — A message that is either a) an inquiry as to the health and welfare of an individual in the disaster area or b) an advisory or reply from the disaster area that indicates all is well should carry this precedence, which is abbreviated W on cw. These messages are handled *after* Emergency and Priority traffic but before Routine.

ROUTINE — Most traffic normal times will bear this designation. In disaster situations, traffic labeled Routine (R on cw) should be handled *last*, or not at all when circuits are busy with Emergency, Priority or Welfare traffic.

Handling Instructions

HXA — (Followed by number.) Collect landline delivery authorized by addressee within . . . miles. (If no number, authorization is unlimited.)

HXB — (Followed by number.) Cancel message if not delivered within . . . hours of filing time; service originating station.

HXC — Report date and time of delivery (TOD) to originating station.

HXD — Report to originating station the identity of station from which received, plus date and time. Report identity of station to which relayed, plus date and time, or if delivered report date, time and method of delivery.

HXE — Delivering station get reply from addressee, originate message back.

HXF — (Followed by number.) Hold delivery until . . . (date).

HXG — Delivery by mail or landline toll call not required. If toll or other expense involved, cancel message and service originating station.

This prosign (when used) will be inserted in the message preamble before the station of origin, thus(NR 207 R HXA50 W1AW 12 . . . (etc.). If more than one HX prosign is used, they can be combined if no numbers are to be inserted, otherwise the HX should be repeated, thus: NR 207 R HXAC W1AW . . . (etc.), but: NR 207 R HXA50 HXC W1AW . . . (etc.); On phone, use phonetics for the letter or letters following the HX, to insure accuracy.

ARRL QN SIGNALS FOR CW NET USE

QNA*	Answer in prearranged order.
QNB*	Act as relay Between and
QNC	All net stations Copy.
QND*	I have a message for all net stations.
QNE*	Net is Directed (controlled by net control station).
QNF	Entire net stand by.
QNG	Net is Free (not controlled).
QNH	Take over as net control station.
QNI	Your net frequency is High.
QNN	Net stations report In.*
QNJ	I am reporting into the net. (Follow with a list or traffic or QRU).
QNK*	Can you copy me?
QNL	Can you copy?
QNM*	Transmit message for to
QNN	Your net frequency is Low.
QNO	Your are QRMING the net. Stand by.
QNP	Net control station is
QNQ*	What station has net control?
QNT	Station is leaving the net.
QNU*	Unable to copy you.
QNV*	Unable to copy
QNW	Move frequency to and wait for to finish handling traffic. Then send him traffic for
QNY*	Answer and Receive traffic.
QNS	Following Stations are in the net.* (Follow with list.)
QNT	Request list of stations in the net.
QNU*	I request permission to leave the net for minutes.
QNV*	The net has traffic for you. Stand by.
QNY*	Establish contact with on this frequency. If successful, move to and send him traffic for
QNX	How do I route messages for?
QNZ	You are excused from the net.*
QNY*	Request to be excused from the net.
QNZ	Shift to another frequency (or to kHz) to clear traffic with
QNT	Zero beat your signal with mine.

*For use only by the Net Control Station.

Notes on Use of QN Signals

The QN signals listed above are special ARRL signals for use in amateur cw nets *only*. They are not for use in casual amateur conversation. Other meanings that may be used in other services do not apply. Do not use QN signals on phone nets. *Say it with words.* QN signals need not be followed by a question mark, even though the meaning may be interrogatory.

INTERNATIONAL Q SIGNALS

A Q signal followed by a ? asks a question. A Q signal without the ? answers the question affirmatively, unless otherwise indicated.

QRA	What is the name of your station?
QRG	What's my exact frequency?
QRH	Does my frequency vary?
QRI	How is my tone? (1-3)
QRK	What is my signal intelligibility? (1-5)
QRL	Are you busy?
QRM	Is my transmission being interfered with?
QRN	Are you troubled by static?
QRO	Shall I increase transmitter power?
QRP	Shall I decrease transmitter power?
QRQ	Shall I send faster?
QRS	Shall I send slower?
QRT	Shall I stop sending?
QRU	Have you anything for me? (Answer in negative).
QRV	Are you ready?
QRW	Shall I tell you're calling him?
QRX	When will you call again?
QRZ	Who is calling me?
QSA	What is my signal strength? (1-5)
QSB	Are my signals fading?
QSD	Are my signals mutilated?
QSG	Shall I send messages at a time?
QSK	Can you work breakin'?
QSL	Can you acknowledge receipt?
QSM	Shall I repeat the last message sent?
QSO	Can you communicate with direct?
QSP	Will you relay to?
QSV	Shall I send a series of V's?
QSW	Will you transmit on?
QSX	Will you listen for on?
QSY	Shall I change frequency?
QSZ	Shall I send each word/group more than once? (Answer, send twice or
QTA	Shall I cancel number
QTB	Do you agree with my word count? (Answer negative).
QTC	How many messages have you to send?
QTH	What is your location?
QTR	What is your time?
QTV	Shall I stand guard for you
QTX	Will you keep your station open for further communication with me?
QUA	Have you news of

ABBREVIATIONS, PROSIGNS, PROWORDS

CW	PHONE (meaning or purpose, exception obvious)	CW	PHONE (meaning or purpose, exception obvious)
AA	(Separation between parts of address or signature.)	HX	(Handling instructions. Optional part of preamble.)
AA	All after (use to get fills).	.....	Initial(s). Single letter(s) to follow.
AB	All before (used to get fills).	IMI	Repeat; I say again. (Difficult or unusual words or groups.)
ADEE	Addressee (name of person to whom message addressed).	K	Go ahead; over; reply expected. (Invitation to transmit.)
ADR	Address (second part of message).	N	Negative, incorrect; no more. (No more messages to follow.)
AR	End of message (end of record copy).	NR	Number. (Message follow.)
ARL	(Used with "check," indicates use of ARRL numbered message in text.)	PBL	Preamble (first part of message).
AS	Stand by; wait.	.....	Read back. (Repeat as received.)
B	More (another message to follow).	R	Roger; point. (Received; decimal point.)
BK	Break; break me; break-in (interrupt transmission on cw. Quick check on phone).	SIG	Signed; signature (last part of message).
BT	Separation (break) between address and text; between text and signature.	SK	Out; clear (end of communication, no reply expected).
C	Correct; yes	TU	Thank you.
CFM	Confirm. (Check me on this.)	WA	Word after (used to get fills).
CK	Check	WB	Word before (used to get fills).
DE	From; this is (preceding identification).	.....	Speak slower.
HH	(Error in sending. Transmission continues with last word correctly sent.)	.....	Speak faster.

AMATEUR MESSAGE FORM

Every message originated and handled should contain the following component parts in the order given.

I PREAMBLE

- a. Number (begin with 1 each month or year)
- b. Precedence (R, W, P or EMERGENCY)
- c. Handling Instructions (optional, see text)
- d. Station of Origin (first amateur handler)
- e. Check (number of words/groups in text only)
- f. Place of Origin (not necessarily location of station of origin)
- g. Time Filed (optional with originating station)
- h. Date (must agree with date of time filed)

II ADDRESS (as complete as possible, include zip code and telephone number)

III TEXT (limit to 25 words or less, if possible)

IV SIGNATURE

CW: Note that X, when used in the text as punctuation, counts as a word. The prosign **AA** separates the parts of the address, **BT** separates the address from the text and the text from the signature. **AR** marks end of message; this is followed by B if there is another message to follow, by N if this is the only or last message. It is customary to copy the preamble, parts of the address, text and signature on separate line.

RTTY: Same as cw procedure above, except (1) use extra space between parts of address, instead of **AA**; (2) omit cw procedure sign **BT** to separate text from address and signature, using line spaces instead; (3) add a CFM line under the signature, consisting of all names, numerals and unusual words in the message in the order transmitted.

PHONE: In general, use *prowords* in place of procedural signals or *prosigns*. The above message on phone would go something like this: "Message Follows number one, routine HX Golf, W1AW, eight, Newington, Connecticut, one eight thuhree zero zulu, July one, Donald Initial R Smith, Figures one six lower, East Sixth Avenue, North River City, Missouri zero zero seven eight nine, Telephone sev-ven thuhree thuhree, thuhree niyen six eight. Break Happy Birthday X-ray see you soon X-ray love Break Diana, End of Message, Over." Speak in measured tones, emphasizing every syllable. Spell out phonetically all difficult or unusual words, but do *not* spell out common ones.

PRECEDENCES

The precedence will follow the message number. For example, on cw 207R or 207 EMERGENCY. On phone, "Two Zero Seven, Routine (or Emergency)."

EMERGENCY — Any message having life and death urgency to any person or group of persons, which is transmitted by Amateur Radio in the absence of regular commercial facilities. This includes official messages of welfare agencies during emergencies requesting supplies, materials or instructions vital to relief of stricken populace in emergency areas. During normal times, it will be *very rare*. On cw, this designation will *always* be spelled out. When in doubt, do *not* use it.

PRIORITY — Important messages having a specific time limit. Official messages not covered in the Emergency category. Press dispatches and other emergency-related traffic not of the utmost urgency. Notification of death or injury in a disaster area, personal or official. Use the abbreviation **P** on cw.

WELFARE — A message that is either a) an inquiry as to the health and welfare of an individual in the disaster area or b) an advisory or reply from the disaster area that indicates all is well should carry this precedence, which is abbreviated **W** on cw. These messages are handled *after* Emergency and Priority traffic but before Routine.

ROUTINE — Most traffic normal times will bear this designation. In disaster situations, traffic labeled Routine (**R** on cw) should be handled *last*, or not at all when circuits are busy with Emergency, Priority or Welfare traffic.

Handling Instructions

HXA — (Followed by number.) Collect landline delivery authorized by addressee within miles. (If no number, authorization is unlimited.)

HXB — (Followed by number.) Cancel message if not delivered within hours of filing time; service originating station.

HXC — Report date and time of delivery (TOD) to originating station.

HXD — Report to originating station the identity of station from which received, plus date and time. Report identity of station to which relayed, plus date and time, or if delivered report date, time and method of delivery.

HXE — Delivering station get reply from addressee, originate message back.

HXF — (Followed by number.) Hold delivery until (date).

HXG — Delivery by mail or landline toll call not required. If toll or other expense involved, cancel message and service originating station.

This prosign (when used) will be inserted in the message preamble before the station of origin, thus(NR 207 R HXA50 W1AW 12 (etc.). If more than one HX prosign is used, they can be combined if no numbers are to be inserted, otherwise the HX should be repeated, thus: NR 207 R HXAC W1AW (etc.), but: NR 207 R HXA50 HXC W1AW (etc.); On phone, use phonetics for the letter or letters following the HX, to insure accuracy.

CW MESSAGE EXAMPLE

I NR 1 R HXG W1AW 8 NEWINGTON CONN 1830Z July 1
a b c d e f g h
II DONALD R SMITH AA
164 EAST SIXTH AVE AA
NORTH RIVER CITY MO 00789 AA
733-3968 BT

III HAPPY BIRTHDAY X SEE YOU SOON X LOVE BT
IV DIANA AR

ARRL QN SIGNALS FOR CW NET USE

QNA*	Answer in prearranged order.
QNB*	Act as relay Between and
QNC	All net stations Copy.
	I have a message for all net stations.
QND*	Net is Directed (controlled by net control station).
QNE*	Entire net stand by.
QNF	Net is Free (not controlled).
QNG	Take over as net control station.
QNH	Your net frequency is High.
QNI	Net stations report In.*
	I am reporting into the net. (Follow with a list or traffic or QRU).
QNJ	Can you copy me?
	Can you copy?
QNK*	Transmit message for to
QNL	Your net frequency is Low.
QNM*	Your are QRMing the net. Stand by.
QNN	Net control station is
	What station has net control?
QNO	Station is leaving the net.
QNP	Unable to copy you.
	Unable to copy
QNQ*	Move frequency to and wait for to finish handling traffic. Then send him traffic for
QNR*	Answer and Receive traffic.
QNS	Following Stations are in the net.* (Follow with list.)
	Request list of stations in the net.
QNT	I request permission to leave the net for minutes.
QNU*	The net has traffic for you. Stand by.
QNV*	Establish contact with on this frequency. If successful, move to and send him traffic for
QNW	How do I route messages for?
QNX	You are excused from the net.*
	Request to be excused from the net.
QNY*	Shift to another frequency (or to kHz) to clear traffic with
QNZ	Zero beat your signal with mine.

*For use only by the Net Control Station.

Notes on Use of QN Signals

The QN signals listed above are special ARRL signals for use in amateur cw nets *only*. They are not for use in casual amateur conversation. Other meanings that may be used in other services do not apply. Do not use QN signals on phone nets. *Say it with words.* QN signals need not be followed by a question mark, even though the meaning may be interrogatory.

INTERNATIONAL Q SIGNALS

A Q signal followed by a ? asks a question. A Q signal without the ? answers the question affirmatively, unless otherwise indicated.

QRA	What is the name of your station?
QRG	What's my exact frequency?
QRH	Does my frequency vary?
QRI	How is my tone? (1-3)
QRK	What is my signal intelligibility? (1-5)
QRL	Are you busy?
QRM	Is my transmission being interfered with?
QRN	Are you troubled by static?
QRO	Shall I increase transmitter power?
QRP	Shall I decrease transmitter power?
QRQ	Shall I send faster?
QRS	Shall I send slower?
QRT	Shall I stop sending?
QRU	Have you anything for me? (Answer in negative).
QRV	Are you ready?
QRW	Shall I tell you're calling him?
QRX	When will you call again?
QRZ	Who is calling me?
QSA	What is my signal strength? (1-5)
QSB	Are my signals fading?
QSD	Are my signals mutilated?
QSG	Shall I send messages at a time?
QSK	Can you work breakin?
QSL	Can you acknowledge receipt?
QSM	Shall I repeat the last message sent?
QSO	Can you communicate with direct?
QSP	Will you relay to?
QSV	Shall I send a series of V's?
QSW	Will you transmit on?
QSX	Will you listen for on?
QSY	Shall I change frequency?
QSZ	Shall I send each word/group more than once? (Answer, send twice or
QTA	Shall I cancel number
QTB	Do you agree with my word count? (Answer negative).
QTC	How many messages have you to send?
QTH	What is your location?
QTR	What is your time?
QTV	Shall I stand guard for you
QTX	Will you keep your station open for further communication with me?
QUA	Have you news of

ABBREVIATIONS, PROSIGNS, PROWORDS

CW	PHONE (meaning or purpose, exception obvious)	CW	PHONE (meaning or purpose, exception obvious)
AA	(Separation between parts of address or signature.)	HX	(Handling instructions. Optional part of preamble.)
AA	All after (use to get fills).	IMI	Initial(s). Single letter(s) to follow. Repeat; I say again. (Difficult or unusual words or groups.)
AB	All before (used to get fills).	K	Go ahead; over; reply expected. (Invitation to transmit.)
ADEE	Addressee (name of person to whom message addressed).	N	Negative, incorrect; no more. (No more messages to follow.)
ADR	Address (second part of message).	NR	Number. (Message follow.)
AR	End of message (end of record copy).	PBL	Preamble (first part of message).
ARL	(Used with "check," indicates use of ARRL numbered message in text.)	....	Read back. (Repeat as received.)
AS	Stand by; wait.	R	Roger; point. (Received; decimal point.)
B	More (another message to follow).	SIG	Signed; signature (last part of message).
BK	Break; break me; break-in (interrupt transmission on cw. Quick check on phone).	SK	Out; clear (end of communication, no reply expected).
BT	Separation (break) between address and text; between text and signature.	TU	Thank you.
C	Correct; yes	WA	Word after (used to get fills).
CFM	Confirm. (Check me on this.)	WB	Word before (used to get fills).
CK	Check	....	Speak slower.
DE	From; this is (preceding identification).		Speak faster.
HH	(Error in sending. Transmission continues with last word correctly sent.)	-over-	



1988 ANNUAL CLUB REPORT FORM ARRL

Club Name W1PDX Amador Radio Club Call W1LBHZ Date 10/1/88

Area of coverage _____

Special Service Club? yes no Specialty (check the appropriate category or categories)
 General School or Youth Group DX
 Repeater Contest Council Public Service/Emergency
 VHF Packet Radio

School and Youth Groups only: Geoff Parker
Name of ARRL member Geoff Parker Call sign N6Gmf
(must be the faculty advisor or Club President)

Number of licensed amateurs 14 Number of voting members 12

Number of ARRL members 7 (must be at least 51% of the number of voting members)

Total club membership 14 If the number of ARRL members = the total club membership and you would like to be recognized as a 100%
ARRL Club, please attach a complete membership roster, including callsigns.

Club Mailing Address or contact person
Name Pete Bauder Cal Poly ARC Office: Secretary/Treasurer Call sign: N6Gmf

Mailing Address D.U. Box 853 Cal Poly State University San Luis Obispo CA 93407

Day Telephone (805) 541-4421
area code

May we publish these numbers? yes
 no

Night Telephone (805) 925-84659
area code

Club President
Name Geoff Parker Call sign: N6Gmf

Mailing Address 2861 Johnson Ln #1 San Luis Obispo CA 93401

Day Telephone (805) 544-0365
area code

May we publish these numbers? yes
 no

Night Telephone (805) 544-0365
area code

For use by HQ only in emergency when President and contact person are unavailable

Third contact Pete Stadther Call sign: KT6LWC

Day Telephone (805) 549-8274
area code Night Telephone (805) 549-8274
area code

Meeting Location Bldg. 20, Engineering Room 128, Cal Poly

Meeting Day and Time Thursday (1st & 3rd), 7:30pm Average Attendance: 10

Name of Club Newsletter —None—

Make sure ARRL HQ, your Director, SM and ACC are on the mailing list

In what month are elections held? May Do you have a Novice class? yes no

Classes for General or higher yes no

Call and frequency of club repeater W1LBHZ 46.76 + 442.3

Does your club conduct an annual hamfest? yes no month _____ anticipated attendance _____

Do you wish to have prospective amateurs referred to your club? yes no

NOTICE: See reverse side for important information

Please return all but the last page to ARRL HQ

The Affiliated Club Annual Report Form

What is the Annual Report used for?

Information about your club is given to prospective radio amateurs who want to learn more about our hobby. In addition, *Field Forum*, a special-interest newsletter, is sent to your club four times a year. Other mailings go out on a non-scheduled basis. The annual report is our way of keeping your club records at Hq. up-to-date.

Should two years go by without our receiving an annual report, your club status will be changed to the inactive file. If this happens, you can return to active affiliated status at any time by simply completing an annual report and confirming 51% ARRL membership among your voting members.

What Are the Benefits of Affiliation?

In addition to being associated with 2000 like-minded clubs with similar goals (remember, there's strength in numbers), being an affiliated club brings your group a number of tangible benefits, presented here:

- 1] Field Forum, quarterly issues jam packed with interesting news and ideas for and about clubs and Amateur Radio in general
- 2] The opportunity to order (for free) the ARRL Annual Report (this is the business report of the ARRL)
- 3] ARRL-sponsored liability and equipment insurance
- 4] Referrals of prospective radio amateurs to your club (great for new member promotion)
- 5] ARRL club stationery
- 6] \$5.00 commission for every new ARRL member recruited by your club (the "Club Challenge for the '80s")
- 7] Free mailing labels or lists of ARRL members or clubs once a year
- 8] Free geographical lists of all amateurs in a specific city
- 9] Free loans of films and other audio-visual aids and program materials
- 10] Free clip art, great for fleshing out your newsletter
- 11] "Join a Radio Club" brochure — promotes your group to amateurs who may want to join it
- 12] \$2.00 commission for every ARRL membership renewal handled by your club
- 13] Only affiliated clubs are eligible for participation in the gavel competitions in the ARRL DX Contest, the ARRL November Sweepstakes and the ARRL VHF Sweepstakes
- 14] Affiliated clubs can obtain a complete set of ARRL publications for the discount price of \$90; good for donating to your local library
- 15] Free lists of other affiliated clubs in your section—for coordinating large-scale events
- 16] Use of ARRL logo on newsletters and letterhead.
- 17] 50% discount on club advertisements in *QST*

The Special Service Club Program

In addition to regular affiliated-club status, a special program exists to recognize those groups who do more than the usual for their communities and for Amateur Radio. These well-rounded groups are the Special Service Clubs (SSCs).

SSCs are the leaders in their Amateur Radio communities. They're the ones with the active training classes, the highly-visible publicity program and the members who actively pursue technical projects. In short, SSCs are well-rounded ambitious clubs who scorn the word "complacent."

Why Become an SSC?

In addition to the benefits regularly-affiliated clubs receive, Special Service Clubs get these advantages:

- 1] Free, the *ARRL Letter*, hot and accurate Amateur Radio news, every other week
- 2] Free bimonthly lists of new amateurs in your geographical area
- 3] Free bimonthly lists of new League members in your geographical area
- 4] SSC clip art
- 5] Recognition in *QST* and *Field Forum* as your club renews or becomes an SSC
- 6] SSC meeting and contact information is published in the *ARRL Repeater Directory*
- 7] SSC patches
- 8] The opportunity to appoint local Awards Managers

How to Become an SSC

To become an SSC, all you have to be is a club actively affiliated with the ARRL, have 51% ARRL membership and fill out a one-page application form (obtainable from your Affiliated Club Coordinator (ACC)). Send the completed form to your ACC, who will contact you to discuss your club's projects. Your ACC is listed in the *Field Resources Directory White Pages*.



1986 ANNUAL CLUB REPORT FORM ARRL

Club Name Music Club Call W0BHZ Date 5-1-86

Area of coverage SW LA & OREGON

Special Service Club? yes no Specialty (check the appropriate category or categories)
 General School or Youth Group DX Public Service/Emergency
 Repeater Contest Council VHF

School and Youth Groups only:
 Name of ARRL member Tom Morris Call sign
 (must be the faculty advisor or Club President)

Number of licensed amateurs 15 Number of voting members 7

Number of ARRL members 4 (must be at least 51% of the number of voting members)

Total club membership 15 If the number of ARRL members = the total club membership and you would like to be recognized as a 100% ARRL Club, please attach a complete membership roster, including callsigns.

Club Mailing Address (Newsletter Editor OR, if no editor, your ARRL Liaison)

Name 5101 11th Street SW

Mailing Address

Day Telephone (405) 571-4 area code May we publish these numbers? yes no

Night Telephone (405) 571-4 area code

Club President

Name Tom Morris

Mailing Address

Day Telephone (405) 571-4 area code May we publish these numbers? yes no

Night Telephone (405) 571-4 area code

For use by HQ only in emergency when Editor and President are unavailable

Third contact

Day Telephone (405) 571-4 area code Night Telephone (405) 571-4 area code

Meeting Location 5101 11th Street SW

Meeting Day and Time 1st 4th Thurs.

Name of Club Newsletter Musician

Make sure ARRL HQ, your Director, SM and ACC are on the mailing list

In what month are elections held? May

Call and frequency of club repeater W6EJ 146.40/144.40

Does your club conduct an annual hamfest? yes no month July anticipated attendance 100

Do you wish to have prospective amateurs referred to your club? yes no

NOTICE: See reverse side for important information

REMEMBER: the goldenrod copy (last page) is for your records

The Affiliated Club Annual Report Form

What is the Annual Report used for?

Information about your club is given to prospective radio amateurs who want to learn more about our hobby. In addition, *Field Forum*, a special-interest newsletter, is sent to your club four times a year. Other mailings go out on a non-scheduled basis. The annual report is our way of keeping your club records at Hq. up-to-date.

Should two years go by without our receiving an annual report, your club status will be changed to the inactive file. If this happens, you can return to active affiliated status at any time by simply completing an annual report and confirming 51% ARRL membership among your voting members.

What Are the Benefits of Affiliation?

In addition to being associated with 2000 like-minded clubs with similar goals (remember, there's strength in numbers), being an affiliated club brings your group a number of tangible benefits, presented here:

- 1] Field Forum, quarterly issues jam packed with interesting news and ideas for and about clubs and Amateur Radio in general
- 2] The opportunity to order (for free) the ARRL Annual Report (this is the business report of the ARRL)
- 3] ARRL-sponsored liability and equipment insurance
- 4] Referrals of prospective radio amateurs to your club (great for new member promotion)
- 5] ARRL club stationery
- 6] \$5.00 commission for every new ARRL member recruited by your club (the "Club Challenge for the '80s")
- 7] Free mailing labels or lists of ARRL members or clubs once a year
- 8] Free geographical lists of all amateurs in a specific city
- 9] Free loans of films and other audio-visual aids and program materials
- 10] Free clip art, great for fleshing out your newsletter
- 11] "Join a Radio Club" brochure — promotes your group to amateurs who may want to join it
- 12] \$2.00 commission for every ARRL membership renewal handled by your club
- 13] Only affiliated clubs are eligible for participation in the gavel competitions in the ARRL DX Contest, the ARRL November Sweepstakes and the ARRL VHF Sweepstakes
- 14] Affiliated clubs can obtain a complete set of ARRL publications for the discount price of \$90; good for donating to your local library
- 15] Free lists of other affiliated clubs in your section—for coordinating large-scale events
- 16] Use of ARRL logo on newsletters and letterhead
- 17] 50% discount on club advertisements in *QST*

The Special Service Club Program

In addition to regular affiliated-club status, a special program exists to recognize those groups who do more than the usual for their communities and for Amateur Radio. These well-rounded groups are the Special Service Clubs (SSCs).

SSCs are the leaders in their Amateur Radio communities. They're the ones with the active training classes, the highly-visible publicity program and the members who actively pursue technical projects. In short, SSCs are well-rounded ambitious clubs who scorn the word "complacent."

Why Become an SSC?

In addition to the benefits regularly-affiliated clubs receive, Special Service Clubs get these advantages:

- 1] Free, the *ARRL Letter*, hot and accurate Amateur Radio news, every other week
- 2] Free bimonthly lists of new amateurs in your geographical area
- 3] Free bimonthly lists of new League members in your geographical area
- 4] SSC clip art
- 5] Recognition in *QST* and *Field Forum* as your club renews or becomes an SSC
- 6] SSC meeting and contact information is published in the *ARRL Repeater Directory*
- 7] SSC patches
- 8] The opportunity to appoint local Awards Managers

How to Become an SSC

To become an SSC, all you have to be is a club actively affiliated with the ARRL, have 51% ARRL membership and fill out a one-page application form (obtainable from your Affiliated Club Coordinator (ACC)). Send the completed form to your ACC, who will contact you to discuss your club's projects. Your ACC is listed in the *Field Resources Directory White Pages*.



THE AMERICAN RADIO RELAY LEAGUE, INC.

HEADQUARTERS SOCIETY OF THE INTERNATIONAL AMATEUR RADIO UNION

ADMINISTRATIVE HEADQUARTERS NEWINGTON, CONNECTICUT, U. S. A. 06111

962 Cheyenne Street
Costa Mesa, CA 92626
August 7, 1984

LARRY E. PRICE
WAFIA PRESIDENT
LEONARD M. NATHANSON
Vice Pres. & Secy.
GARFIELD A. ANDERSON
K6GA VICE PRES
JAY A. HOLLADAY
W6EJJ. VICE PRES
RICHARD L. BALDWIN
W1RU. VICE PRES
INTERNATIONAL AFFAIRS
JAMES E. MCCOBB
K1LLU. TREASURER
DAVID SUMNER
K1ZZ. SECRETARY AND
GENERAL MANAGER
203-666-1541
QST
OFFICIAL JOURNAL

Dear Repeater Owner/Trustee,

The well being as well as the future of Amateur Radio depends upon our ability to be self-regulated. In the atmosphere of deregulation and FCC cutbacks it is increasingly important that we support frequency coordinating groups. It is not enough to keep them aware of the status of your repeater system; you should also join as a member to insure that the leadership represents you fairly. Recognized repeater coordinating groups in Southern California are: Two Meter Spectrum Management Association of Southern California (TASMA), P.O. Box 6490, Orange, CA. 92667-1490; 220 Mhz Spectrum Management Association of Southern California (220 SMA), P.O. Box 8306, Van Nuys, CA. 91409; Southern California Repeater and Remote Base Association (SCRRBA), P.O. Box 5967, Pasadena, CA. 91107.

It is also important to support the ARRL. The League is the organization that most represents Amateur Radio at the national level. In our Southwestern Division the VHF Repeater Advisory Committee representative is Karl Pagel, N6BVU, president of 220 SMA and secretary of TASMA, and VHF/UHF Advisory Committee representative is Louis Anciarix, WB6NMT, (with Vice Director Wayne Overbeck, N6NB, as board liaison).

So we can be of greater service, I would be grateful if you would send me information on special activities (such as nets, officers, newsletters, meetings and playing of Westlink etc.).

Keep us informed so we can better serve you!

73,

Fried

Fried Heyn, WA6WZO

Southwestern Division Director



YOUR RADIO CLUB

CONTENTS

SUBJECT	PAGE
Organization	1
Dues and Finance	4
Affiliation with ARRL	5
Club Property	5
Incorporation	6
Maintaining Interest	6
Hamfests	9
Training Program	9
Entertainment	9
A Club Bulletin	10
TVI and BCI	11
Certificates and Contests	11
Federations and Councils	11
A Special Section For Repeater Clubs	12

INTRODUCTION

Wherever there are amateurs there are amateur radio clubs, for amateurs in an area operating without organized association with each other are not realizing the full advantages of information exchange and the fraternal spirit of amateur radio. In the U.S. and Canada there are an estimated 3,000 amateur radio clubs. As new clubs are formed, Headquarters is asked for information regarding organization and "affiliation" with ARRL. Existing clubs also frequently ask us for ideas for programs, or otherwise keeping up club activity and interest so that members do not drift away.

Formal "affiliation" with ARRL has a special meaning. It shows that the club is favorably inclined toward the aims and purposes of the League, and at the same time realizes a number of benefits through the mutual association.

Our purpose here is to consolidate as much useful information as possible on organizing and operating amateur radio clubs, based on ARRL's more than 50 years of experience. This information will be revised and updated from time to time as required, and supplemented by lists of training aids, a sample constitution, and other aids. Your assistance in making such revisions is solicited, based on your club's experiences.

ORGANIZATION

Why radio clubs: The ham is a social animal. He loves to talk to others, especially other hams. The social aspect of ham radio is probably one of the major attractions of the hobby. And radio clubs, with in-person, face-to-face meetings provide a type of social contact unavailable on the air.

Radio clubs are also an instant source of manpower for training classes, antenna parties, public service functions and just plain ham help. Historically amateur radio clubs have been the mainstay of organized amateur radio, providing invaluable services to its members and the non-amateur public. But most of all, radio clubs are fun.

Clubs are formed whenever more than one amateur feels a need for some direct contact with his fellow amateurs in the area. The club may be a specialist, based around a repeater, contesting, DX chasing or public service, or it may be (as with the majority of clubs), a general interest club. The members will be as diverse as amateurs everywhere are: from 8 to 80, schoolgirl to company executive, with one common interest: a love of ham radio.

Starting from Scratch. Most clubs start out by a group of amateurs simply deciding to organize a local club. Assuming it is a general club--that is, one in which all local amateurs and would-be amateurs are considered eligible for membership--the best way to go about this is an active promotional campaign for the club. This involves getting the local papers to print meeting notices, and putting posters in all those places where people interested in radio are likely to gather. For the notices to the paper, be sure they are double-spaced, typed and short. They should include a name and telephone number to contact for further information or in case someone cannot make the meeting. For more PR ideas, write for our PR Kit.

Posters are available from the League for the purpose of advertising club meetings. These should be placed in schools, with the help of science and electronics teachers, and especially in technical and community colleges, churches, and places of business dealing with electronics. Don't forget to contact scout masters.

American Radio Relay League
225 Main Street
Newington, Connecticut, U.S.A. 06111
203-666-1541

Contact the boy and girl scout leaders in your area, as well as any other youth organization. Also, the League will provide lists of League members in a given area for membership solicitation purposes, to clubs which were once affiliated.

A tremendous potential source of members is the local CB group. Large numbers of CBers are flocking to amateur radio, and are eager to meet with amateurs to learn more about ham radio. To contact those people, posters in CB stores and personal contact with a few of the CBers in the area should begin to spread the word around.

Repeater groups have an easy time recruiting members: simply talk about the club over the machine.

A final source of potential members is the Callbook. Someone with good eyesight and lots of patience can go through the Callbook looking for amateurs with zip codes in your club region.

If your club is typical, there are one or two people actively promoting the formation of the club. One of these persons should take charge immediately, to coordinate the different activities involved in setting up the club, and to take responsibility that everything gets done on time. Even if the actual work is parcelled out among the prospective members, a single coordinator is needed to eliminate duplication of effort and to fill otherwise harmful gaps.

First Meeting. That first meeting is important, because its tone may very well decide whether the club project will succeed or fail. It can be held in a school, church, Red Cross or civil defense quarters, or in a private home if one is available with sufficient facilities. Frequently business facilities are also available, such as a manufacturing plant auditorium, bank building, or municipal or state government building. Even in small towns there are any number of possibilities. Check out the possibilities, make a decision, then send out the announcement, leaving plenty of time from announcement, to meeting date. Don't forget to mention that those unable to attend but interested in the project should notify the coordinator so that he can keep in touch.

Invite a member of the local press to "cover" the meeting; this could result in even more publicity. Getting the word out is important.

If a program other than the humdrum business of getting started, can be arranged for that first get-together, so much the better. It might help draw attendance. The important thing to discuss is first whether or not the gathering desires to form a club, second what kind of club (devoted to what specifically, open to whom, etc.) and then to elect officers and make arrangements for drawing up a constitution and bylaws or other governing documents.

The larger the first meeting, the more formal it will be. A copy of Roberts Rules of Order will serve as a guide, but strict adherence to such procedure will make the first meeting stiff and stilted; better to be informal and yet try to maintain enough order to accomplish the objectives. What objectives? Well, to begin with, the election of temporary officers. That's right, temporary. Chances are that a large percentage of those attending that first meeting will not know each other but slightly. Also, many who attend out of curiosity may decide later not to become members of the club that evolves, so it is possible that the officers elected at that first meeting will not be the ultimate choice of the charter club members.

Nevertheless, such officials are necessary to serve as a "steering" committee to perform the necessary work to get the club organization off the ground. A temporary president, vice president, secretary and treasurer are the usual officers, although if desired a group of four or five local amateurs can be elected as a "Steering Committee" with one of them designated chairman.

The temporary chairman should open the meeting by welcoming those present and thanking them for attending, and by reading or relating communications from those who were unable to attend but expressed an interest. After that, since the meeting was called for the express purpose of forming a club, some discussion should be led as to specifically what *kind* of club should be formed, and expression of ideas from the floor on this subject should be encouraged for a limited time, without the necessity of arriving at any firm conclusion at that time.

Election of temporary officers or a steering committee can be accomplished in several ways. The most common way is simply to ask for nominations (requiring seconds) from the floor, then voting either by secret ballot or show of hands when nominations are closed. This procedure would be followed for each office.

Another way that is often followed and is becoming increasingly popular, is requesting everyone to write the name of his choice on a piece of paper provided. The "ballots" are then collected and tabulated. If any one person has a majority of the votes, he is declared elected without further balloting. However, if none of the persons named on the first ballot receives a majority of votes, the two highest are then the candidates for the final ballot.

Club Name. It is too early to try to choose a name for the club at the first meeting, but the subject should be mentioned and the group asked to think about it. Suggestions from the floor at that time are in order, and all such suggestions should be recorded for further consideration by the temporary officers or steering committee. Other suggestions for a club name should be conveyed to the chairman or temporary president prior to the second meeting.

Constitution. Included in this folder is a sample constitution provided by ARRL for your assistance and guidance. It is not intended that this be followed to the letter; indeed, your embryonic club will have many



BOY, WE HAVE A PROBLEM!

special requirements which will have to be worked in, such as classes of membership, special officers, provisions concerning membership eligibility, attendance, payment of dues, meeting places, etc. Most constitutions contain the basic matters in the articles, with details which may change from time to time in the bylaws, the latter easier to amend than the former. Note that the articles often simply state a principle, referring to the bylaws for details such as amount of dues, frequency of meetings, etc. However, this is just a suggested format and need not necessarily be followed. If desired, the constitution can be in one-two-three paragraph order from beginning to end.

Drawing up a proposed constitution is a principal task of the temporary officers or steering committee, and should be done with the utmost care. The wording of each article and bylaw should be carefully tailored for maximum understandability, never mind how legal-sounding or flowery it might or might not be. Committees are often inclined to try to impress the membership with their rhetoric, sometimes as a result producing an ambiguous or hard-to-understand document. Keep it simple and straightforward.

Ratification. The next step is ratification. Procedure for ratification is by no means automatic. Attendance at the first and succeeding meetings is a pretty good indication how much interest there is in formation of the club, and those present can be depended upon to be much interested in what is written into the governing documents. Therefore, each article of the constitution, starting with the preamble, should be carefully read and ample time given for comments, suggestions or protests from the floor. Where controversial points arise, a vote should be taken (by a show of hands) whether or not the controversial article or bylaw should remain or be modified or amended according to motion. After all this has been accomplished (sometimes a long and tedious process), a draft of the constitution should be mailed to each member prior to a final ratification vote at the next meeting. If affirmative, the club has a constitution. If negative, the committee goes back to work:

Election of Permanent Officers. Those who are present at the ratification of the constitution and those who participated in drawing it up should sign it as charter members of the club, and perhaps make a first payment of dues to signify their serious intention. These then will be the eligible voters for election of the first permanent slate of officers. This could be a historical moment. The election should be conducted in accordance with procedures already described, or (in large clubs) by voting on candidates already selected by a nominating committee appointed by the temporary president or chairman. The purpose of such a committee is to prevent complications in large groups, make sure of who is and is not willing to run, and in general to simplify the procedure. The usual club elects a president, vice president, secretary and treasurer. Some clubs also elect an activities manager to arrange programs and other club activities such as club dinners, picnics, Field Day, contests (both intra-club and national competitions) and other on-the-air functions or activities. Larger clubs may wish to elect a program chairman and also a communications manager to separate or divide these functions. Some clubs also elect two secretaries, one

recording and one corresponding, the former to keep records and minutes of meetings, the latter to handle all club correspondence.

After the election has been completed, the temporary officers resign and the new officers take over -- or sometimes the temporary officers complete the meeting and new officers don't take over until the following meeting. In any event, some ceremony is appropriate on such occasions. Elected officers can make short speeches, telling something about their background and how they intend conducting their offices, and in general conveying an atmosphere that the club is really an existing entity and is under way.

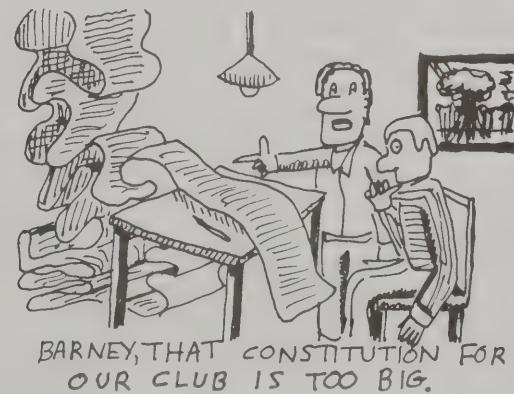
Meeting Place: Finding a meeting place is an important part of the formation of a club. The meeting place should be reasonably centrally located, and convenient for the majority of members. It should be as permanent as possible, so that the club can enjoy the continuity of meeting in the same place month after month. This is particularly important with the more loosely organized clubs, as members who have not been to a meeting in a long time can still find the proper place.

There are a large variety of places to look for meeting places. Good possibilities are local schools, banks, churches and public service organizations, such as the Red Cross. The latter is particularly good due to the long-standing cooperative agreement between the League and the Red Cross.

The room should be large enough to hold the anticipated membership without undue crowding, and plenty of chairs should be readily available. The smoking regulations should be checked, and ash trays provided as necessary. It is a good idea to have some kind of club banner or poster that can convert the meeting room into a club room with little effort. Other useful accessories are a table and podium for speakers, and facilities for projection of slides and films. A public address system should be avoided if possible; they are usually much more trouble than they are worth.

The meeting room should be kept in excellent condition at all times. Particularly if you are getting the room without charge, the room should always be left cleaner than when you arrived. Thus knowing the location of the cleaning facilities is helpful.

Committees. Certain club functions can be put in the hands of standing committees, provided for in the constitution or bylaws or created as needed by being voted on at meetings. Examples: TVI Committee, Field Day Committee, Operations Committee, Program



Committee, Membership Committee, Training Committee, Technical Committee. From time to time there will arise the necessity for "Ad Hoc" (special purpose) committees, but these can be appointed by the president as the necessity arises. Having standing committees is a good way to keep everyone busy, but don't overload a membership-poor club with them. The average club (30 members or so) will need only two or three standing committees.

Board of Directors. Some of the larger clubs have a Board of Directors in addition to the officers. In fact, the constitution can provide simply for the election of the Board of Directors of a fixed number of members. The Board then elects a chairman, sets the club policies at the pleasure of the membership and elects the officers. Such a Board can keep a lot of procedural matters out of meetings, if this is considered desirable. The arrangement is flexible, of course, in giving the Board of Directors greater or lesser powers in accordance with the wishes of the membership.

Meetings. Most clubs meet semi-monthly or monthly. Not very many meet every week. The smaller the community, the more often meetings can be held, because the smaller and more closely-knit groups have more in common and travel distances are more convenient. In large-membership clubs, meetings are held monthly, with perhaps a meeting of the Executive Committee (usually the elected officers) in between. The date or day of the meeting should be selected in accordance with availability of the maximum number of members. If weekly, by the day of the week (e.g., every Tuesday). If semi-monthly, by the ordinal days within the month (e.g., every other Monday). And if monthly, by the ordinal day within the month (e.g., third Thursday of every month).

Meetings should be conducted in an orderly, but not too firm, fashion. Roberts Rules of Order take a severe beating in most amateur club meetings. The important thing is to keep control of the meeting; if it gets out of hand, chaos results and little or nothing is accomplished. When a member has the floor, don't let anyone interrupt him: if he becomes long-winded and members start to get impatient, the chairperson should interrupt. Don't let the meeting get bogged down through lack of procedure either. The chairperson should be responsible for seeing it is kept orderly and should be permitted to perform this function (more on meetings follows).

After opening the meeting, the usual first order of business is the reading of the minutes of the previous meeting and correction or acceptance of such. Next comes reports of officers, including the reading or passing around of communications from the secretary. Following that, committee chairpersons make reports, if any. Old business (unfinished from previous meetings) follows, then new business (not brought up at a previous meeting). A skillful chairperson can get through most of this quickly to get at the next order of business, the program for the evening--and finally adjournment followed by refreshments and ragchewing. If the program consists of a guest speaker, it is courteous to omit as much business from the meeting as possible so that he will not be detained unnecessarily.

Members should be required to attend meetings to keep their membership in good standing. A good device is a

constitutional clause providing for dropping members who do not attend without explanation.

DUES AND FINANCE

Nearly every club has dues, from as low as 25c per meeting to as much as \$20 per year. Regardless of a club's size, there are almost always expenses to be met. However, there is no point to setting dues at a figure which will pile up in the treasury, nor which will be insufficient to meet the club's needs. It is best to start with a low figure and adjust upward as necessity dictates. If the membership votes in favor of increased activities, or activities that cost money, it follows that they will be willing to and expect to pay higher dues.

Collection of dues is sometimes troublesome. It is less painful to the individual member if they are paid each time he attends a meeting. On the other hand, the member who has lapsed in attendance finds his dues indebtedness piling up and this only encourages him to stay away from meetings. Everything considered, it is probably best for the treasurer to mail bills at the beginning of each quarter, with "overdue" notices as required thereafter. The constitution or bylaws should make some provision for action against members who become too far delinquent.

Some clubs combine ARRL membership and dues. This we are heartily in favor of, and it has the additional advantage of assuring that your club will be 100% ARRL (special recognition for this). It also makes possible automatic renewal of ARRL membership for each member through the club, the whole package (ARRL membership and club dues) payable on a quarterly basis to the club, which realizes \$1.50 on each such membership entry or renewal. This is just one way of doing it, of course; there are many others. For example, some clubs make dues payable in semi-annual or annual installments; it all depends on how the members prefer to do it.

There are other ways for a club to make money, of course; quite a few of them. In fact, some clubs exist entirely on money earned through various activities, and have no dues at all. Such activities are (1) features open to the general public for which admission is charged such as lectures, classes or radio courses, or even social affairs such as card parties or dances; check with local authorities regarding necessity for licenses or permits before taking on such things. (2) Prize drawings of radio equipment or other things; again, be sure to check local



and state ordinances. (3) Auctions -- a lot of fun if properly organized, a skillful auctioneer is on hand and enough of the proper kind of gear for sale to make it interesting. (4) Donations from members; sometimes a wealthy member will offer to donate a sum of money in order to keep dues for club expenses at a nominal figure. (5) Assessments to make up deficits or prospective deficits ordinarily a poor way to raise funds because voting an assessment may drive low-income members out of the club. If this method is used, the members should be unanimously in favor of each such assessment before it is levied. (6) Some clubs stock books which can be purchased at a discount and sell them to members and others at list price. (7) Sponsorship of hamfests or conventions, which is a booklength subject in itself; however, usually this is a break-even project out of which little if any monetary profit is realized.

AFFILIATION WITH ARRL

Affiliation with ARRL offers many advantages to the club and has many benefits. It also has a few requirements. Philosophically, the only requirement is that the club "suitably expresses its sympathy with and allegiance to the aims and policies of the League." Practically, each club applying for affiliation must maintain a voting membership that is 51% or higher ARRL members (full or associate), and at least 51% of voting members be licensed radio amateurs of any grade.

There is a special category of affiliation for youth and school groups that do not normally meet these requirements. For a radio club which especially mentions the name of the sponsoring organization in the club name (Bristol High School ARC) only one member need be a League member and licensed (the president, an advisor or faculty sponsor).

The procedure is fairly simple and straightforward and is described in a letter from the ARRL Club and Training Manager which is a part of this kit as are all the required forms. Also included is a list of the benefits of affiliation. Cost to the club? A little paper work, but zero money!

Staying affiliated is easier than becoming affiliated. All a club needs to do to remain on the active affiliated club list is to complete a simple questionnaire on the state of the club every year. If these questionnaires are not returned for a couple of years, and efforts to locate officers of the club fail, the club is placed in an "inactive" file. Not unaffiliated, only inactive. The simple return of a new questionnaire automatically returns the club to the active roster once again.

Charter Party. Once affiliation is granted by the ARRL Executive Committee the club "Charter" of affiliation is usually mailed directly to the club secretary or other officer designated to receive mail. However, if you are interested in making a ceremony of it, the headquarters will be glad to cooperate. Some clubs ask the division director to visit the club and make a formal presentation, in which case we would send the charter to him instead. Alternatively, the vice director or an assistant director or the SCM could be asked to make the presentation.

CLUB PROPERTY

Club House. The possession of property owned by the club can be either an asset or a liability, depending on what kind of property, how valuable and how managed. One club bought a piece of ground from the county for back taxes, cleared it off through voluntary effort, sold

part of it and built a nice clubhouse (again largely through voluntary effort) with funds so obtained--a neat piece of business. Nearly everywhere there are pieces of real estate of one kind or another that can be purchased at greatly reduced prices and, depending on how many and how willing the skilled people in the club, a clubhouse built or rebuilt or fashioned from existing structures for a nominal assessment on the membership. Your own clubhouse is something to be proud of, but bear in mind that it will need constant maintenance and care and may be subject to property taxes. An ideal "shack" is one with a large room for club meetings which can be equipped with cots for special events, room for a club station, a workshop, a kitchen and of course lavatory facilities. Not many clubs can afford their own shack; rented quarters can serve to house the station and also serve as a clubroom. Even this is too expensive for many clubs, which rent quarters only for meetings, or find meeting facilities which require no rental.

Club Station. How about a club station? Years ago, this was a definite asset because many club members could not afford gear as fine as that made available to the club through the efforts of many members. Today, however, most club stations consist of cast-off equipment of members, equipment obtained through surplus or for the purpose of rendering a communications service in the name of a welfare or government agency such as the Red Cross or civil defense. Most amateurs now prefer to operate their own stations and club stations are used only on special occasions or by those persons having apartment TVI. The situation may be somewhat different in school or university radio clubs, however, where students are away from home and the station is sponsored by the school. Election of a "trustee" to be the licensee is necessary (in a school station usually a faculty member, so the turnover will not be so rapid) and such an election should be noted in the minutes of the meeting so that it can become a part of the application to the FCC. The elected trustee should be an Extra class licensee, if available, otherwise the highest class of licensee in the club, because the club station may be operated only in accordance with the license of the trustee or the license of the operator, whichever is lower. Thus, a General class licensee may observe General class privileges (and no higher) only if the trustee has such privileges; and an Extra Class licensee may not operate the club station in the Extra class portion of the band unless the trustee is also Extra class. The assigned club call may be used by any member operating the station under the authority of the trustee. Members operating should be required to use the club call.

A Club station should be supervised by a committee consisting of a chief operator (not necessarily the trustee), a station engineer or maintenance chief, and two or three additional active amateurs for consultation purposes. The chief operator has charge of seeing that all station operation is legal, ethical and in general on a high plane to give the station a good on-the-air reputation; he may also wish to post certain operating rules to be observed by all operators. The station engineer has charge of installing, modifying, replacing and maintaining all equipment, and seeing that it is properly operated from a technical standpoint. The club station committee will want to get up a complete set of rules covering all phases of the station's operation and post it prominently. A copy of the club's station license should also be posted at the operating position.

Many clubs hold station calls but do not own a station of their own. This is quite legal. In this case the club's call is used on Field Day or other such activities in which the

club establishes a temporary station. Be sure to observe all FCC regulations, especially the one (97.79) specifying that the privileges of the trustee or the operator must be observed, whichever are lower.

Other Property. There are many other items of club property that could be useful to members--things such as measuring equipment of various kinds that can be borrowed by members subject to careful handling (or for a moderate rental fee?) and non-radio items used for various club activities such as stoves, chairs, tables, blackboard, books, mimeograph or other printing facilities, card index, files, code teaching equipment, antenna mast sections, typewriter, work bench, tools, kitchen utensils, etc. almost without end.

A specified club member or committee should be designated to keep track of all such property as to where it is, its condition and occasionally make recommendations for its disposition or procurement of additional property.

INCORPORATION?

A radio club may be incorporated as a non-profit organization, though it is usually advantageous for only the larger clubs that have a club house or own extensive property. Requirements and fees vary considerably from state to state. Information on how to file and the fees involved may be obtained from your own state capitol (Secretary of State). Incorporation makes a legal entity of the club as though the club were an individual, but it is a poor substitute for liability insurance in case a suit is brought against the club and does not relieve any individual member of responsibility for his careless or negligent actions. Court judgments can go beyond the assets of the incorporated group, if they are limited assets.

Many clubs have debated the pros and cons of incorporating. One club in particular (Radio Amateurs of Greater Syracuse, NY), in 1956 enlisted the aid of five lawyers, including the League's general counsel, in making a complete study of the matter and, after all the legal talk was boiled down, came up with the following set of advantages, disadvantages and conclusions:

Advantages

1. Incorporation is an advantage if the club owns or handles property where legal responsibilities of the club begin to approach large proportions. In this case incorporation would relieve individuals, or officers, of responsibility that might otherwise be assessed against them.

2. Membership incorporation indicates a degree of club stability and prestige. This is a controversial point and difficult to evaluate. The Club's constitution, by-laws, and activities are the primary factors in developing stability and prestige--whether incorporated or not.

3. A membership corporation in New York state is considered a non-profit organization and is not required to file tax returns. Of course, R.A.G.S.' present assets and activities (indicated by special postal rates for the *Rags Review*) precludes the need for tax returns.

Disadvantages

1. The act of incorporating does not automatically protect the individual against legal action (suits) involving personal liability. The individual and/or the club should take out an insurance policy to cover special activities such as Field Day, fair exhibits, etc.

2. If incorporated, the club's funds and other assets are more readily accessible and may be more easily attached as a result of legal judgment.

3. An initial forty-dollar (\$40.00) incorporation fee is required in New York state. An attorney fee may also be required.

Pertinent Data

1. Incorporation neither removes nor increases the possibility of a small group maintaining a lasting control or wrongly steering the club. Our present constitution and by-laws prohibit this action if the membership takes an active part in the successful operation of the club.

2. The club can obtain liability insurance for special activities whether the club is incorporated or not. This action is definitely recommended by this committee.

3. There are no complicated revisions required to the constitution or by-laws if the club is incorporated.

4. If incorporated, the Board of Directors, (three minimum required by New York state law) cannot control elections, the club, or its activities. Protection against this is determined by the club's constitution and by-laws.

5. Only about 10% of clubs affiliated with ARRL have incorporated. ARRL has no record of a case where incorporation has "saved the day" against legal action against the club or an individual in the club. The same is also reported by our local legal advisors.

6. A club, whether incorporated or not, can accept gifts subject to the approval of the club membership. The fact that a club or group is incorporated does not automatically permit a donor to claim an exemption for his gift. Proof to the Revenue Department is still required to show the club is non-profit, scientific, religious, charitable, or the like.

An evaluation of these considerations has led this committee to recommend, unanimously, that the club *should not take steps to incorporate at this time*. In the opinion of the committee, the club should consider incorporating *only* when the extent of the club assets is increased to an amount in excess of \$1,000 (approx.) which could occur through ownership of real property (club station, equipment, etc.); or when in the opinion of the Executive Committee, sufficient changes occur in the scope of the club's activities beyond those presently engaged in.

MAINTAINING INTEREST

Meeting Program. Interest in a radio club is manifested mostly in what goes on at meetings. If meetings are full or

poorly run, members lose interest and soon stop attending. It is a very short step from there to cessation of all interest in the club. A few simple rules can help in making meetings snappy and orderly, although it takes more than that to keep up interest in the long run. Nevertheless, as a beginning try observing these simple principles for running the meetings:

1. Start meetings promptly at the appointed time if a quorum is present; otherwise, as soon as this condition exists.

2. Omit the reading of the minutes unless it is desired by the members. If read, make them brief and business-like.

3. Proceed in the order previously described as rapidly as possible to the end of the meeting. Discourage unauthorized interruptions of the person who has the floor, and distractive talking of members among themselves while someone is speaking. It is difficult to do this without offending; a sometimes-effective way is simply to interrupt the floor speaker until the talking subsides, which it soon will when the talkers realize they are being waited upon. Another method is to have an empty glass on the table which can be tapped lightly to attract the notice of the talkers, without interrupting the speaker. It is most impolite to engage in private conversation during a formal meeting. The person having the floor deserves your attention.

Occasionally, when there is a lot of business to discuss, the club can spend a profitable evening without a program, but a club that tries to exist for very long this way will find itself gradually losing attendance. It is important to have a program of some sort and preferably, of course, one that will be of interest to a majority of the members. A few suggested types of features for the meeting program follow:

1. Talks by outsiders. Men of prominence in their field such as SCM, SEC, EC, public service organizers, QSL bureau persons, operator specialists, DX visitors, radio engineers, business men, telephone and power company engineers, radio station executives and other persons who are experts on subjects of interest to the club members should be invited to talk from time to time to appeal to each group interest within the organization, to cover technique, organization and operating angles fully.

2. Talks by club members. (a) Special radio subjects with which members are familiar (may be submitted as a paper entered in a club contest). (b) Series of lectures covering radio theory for general advancement or to train newcomers. (c) Series of lectures covering license examination questions. (d) Demonstrations of home-built gear or net operating and message handling procedure. (e) Contest operating talks. Prizes or convention expense money may be awarded for the "best paper" given each year.

3. Open discussion. Questions proposed by a member and discussed by all, each taking a turn or volunteering. When a satisfactory answer has been found another question is proposed. ARRL has Quiz subjects to assist in such programming.

4. Initiation ceremony. Ritual covering serious side of amateur radio with enough horseplay introduced to make it funny. Serious side should cover the rights of other amateurs on the air.

5. Movies. Radio or other engineering subjects. Local power or telephone companies quite frequently have them available and will display or loan free film. Entertainment type films may also be rented for a nominal fee. ARRL has a few entertainment-type features available to affiliated clubs, in addition to many training films (list available on request).

6. Discussion of controversial current topic in amateur radio, giving everyone an opportunity to air his "gripes." Such discussions often attract attendance, but strict control should be kept over them by an experienced moderator, lest they result in bad feelings.

7. Contests of various kinds within the club can attract attendance and interest. A few examples: (a) Code speed contest, where there are enough good c.w. men in the club to make it interesting. (b) Diagram drawing. (c) Jumbled word -- use radio or electrical terms, with prizes or some kind of recognition to the first one to unscramble the word. (d) Checker or chess tournaments can feature an after-the-meeting get-together if enough of the members are interested -- not only amateur radio activities need be considered. If prizes are given it is advisable to place restrictions on how often an individual can win a prize so that everybody gets a better chance.

8. ARRL night. If possible, a visitor or visitors from the ARRL "official family" or the headquarters staff can spearhead such a program. Members of affiliated clubs will have many questions about the League, and there is always a certain amount of misinformation to be clarified. The club might profitably spend one program a year in reviewing its commitment to amateurs in general through ARRL affiliation -- the reasons for it, the benefits derived, the objectives and principles of ARRL to which the club subscribes.

9. Visitors night. An evening once or twice annually devoted to specially-invited visitors (membership prospects especially) can serve as mutual introduction between club members and other local hams.

As an adjunct to meeting programs, there are a number of other continuing programs which the club can sponsor for the benefit of some or all the membership, such as:

(a) Code practice and/or technical training program. This feature is best presented *before* the meeting. Those members or others interested should show up a half hour or hour earlier than the meeting. The instructor should be chosen from the regular membership of the class. A nominal charge may be made, but it is best to avoid this if possible, except possibly to non-members. Charts may be posted on the bulletin board showing trainee progress -- a sort of "Honor Roll" or "Dean's List." ARRL has a major work program for conducting this.

(b) Reading of all W1AW bulletins at the meetings. Some clubs appoint a member to monitor W1AW just prior to or during meetings and report any special bulletins at club meetings. The W1AW cw bulletin is at 8 P.M. in the eastern time zone, earlier in western time zones, so this is feasible in most cases.



(c) Visitors should be asked to say a few words, after they have been formally introduced to the club by the presiding officer or the person who invited them.

(d) Some members enjoy the after-the-meeting bull sessions more than the meetings themselves. Time should be allowed for them, so that personal conversations are kept out of the main meeting. If the meeting begins at 8 P.M. it should be over by 9, leaving some time for chitchat over coffee and donuts. Even if there is a speaker or some other feature, some thought should be given to keeping the formal part of the meeting down to not more than an hour and a half. Most hams are natural-born gabbers and the "hamfest" atmosphere may attract them as much as any other feature.

(e) Station visiting after the meeting may be in order, providing it does not break up too late. The names and calls of those members' stations open for visitors can be included in the meeting notice or during the meeting. This can go a long way toward keeping members interested in coming to meetings; that is, if a member has been "backsliding," asking his permission to open his station to visitors may bring him back to meetings. If the club shows an interest in the member, chances are good the member will show an interest in the club.

(f) Refreshments are a "must" at club meetings. Most clubs provide coffee and donuts, for which members throw in perhaps a dime for each donut consumed (with guests and visitors being served free, of course). Some clubs serve beer, very few anything harder.

(g) The wives should not be neglected at club meetings. There are many clubs which have auxiliaries along with the regular club activities for the yls. These activities can be arranging club picnics and dinners, providing entertainment, making club banners, entertaining visiting guest speakers, and more. Of course, the ladies can also be included in the regular club activities, and they make excellent candidates for the license classes.

A club *auction*, about once per year, can provide an evening of fun and profit for all concerned if properly handled. Members bring all their surplus, properly tagged, to be auctioned off to the highest bidder, ten or twenty percent of the proceeds to go to the club. (Some members donate their surplus.) Outsiders are also invited to bring their gear to auctions and also to attend just to see the fun; perhaps they will see something they wish to bid on. Your club auction committee will need to set up some rules and procedures to standardize such things as minimum bids, bid increments, credit, selection of auctioneers, requirement that all items purchased must be removed from the premises immediately after the auction, and many other miscellaneous matters that will come up. The quality of the auctioneer is important. His job is to move the equipment, but he should also be able to explain what it is, its original market value, assess its condition, perhaps ask the owner to comment. Such talk should occupy a minimum of time. If the bidding gets slow, the auctioneer should have the power to declare the item sold to the last bidder; that is, an auction can go on all night if the auctioneer has to coax for bids and wait until a prospective bidder makes up his mind. In such cases the conversational noise level goes up, attention wanders; the auctioneer must hold the attention of the audience.

Public Service has always been a basic League objective because it is fundamental to the concept of amateur radio. Every affiliated club is urged to take part in the Public Service Program, both as part of the club program itself and as an exemplary activity of individual members.

The club is an ideal vehicle to get a local emergency preparedness program started if it is lagging in your area. Devote part of several meetings to the subject. Recommend an emergency coordinator appointee to your SCM or SEC and start the program rolling in accordance with the ARRL Operating Manual and the ARRL Public Service Communications Manual (free). The annual Field Day combines a national contest with some emergency preparedness features, and this is an excellent start but it only goes so far. There are also the annual Simulated Emergency Test which is devoted exclusively to emergency preparedness on a national basis, and a continuing program of preparedness in which the club can and should participate in at the local level. If the EC you recommend is appointed, the club will indeed have a large stake in the local program. If not, the club should offer its services to the Emergency Coordinator and urge all members to "sign up" in the ARES, Amateur Radio Emergency Service, the emergency preparedness division of the Amateur Radio Public Service Corps.

Hidden Transmitter Hunts. This can be either a club activity or part of a program at a hamfest or convention. In either case, the rules have to be quite explicit and understood by all to make it interesting.

There are many different ways to run such a hunt, and we can outline only one herewith, but it may suggest others in the reading. The information to follow is paraphrased from a short article by K1CQP which appeared in the ARRL Mobile Manual.

It's a nice sunny Sunday afternoon and all mobiles meet at some prearranged place to begin the hunt. The station to be hidden and its crew have to be there too, because all odometer readings have to be read. Each mobile hunter pays a point penalty for each mile he has to travel to find the hidden station; this keeps down excessive traveling. There is no minimum time factor, and this helps discourage speeding; but each mobile pays another point penalty each time it asks the hidden transmitter for a bearing transmission. However, asking for a bearing may lessen the mileage necessary to find the hidden rig. Of course, when you ask for a bearing the other mobiles can also benefit from it, so cunning and secretiveness become factors. And most important of all, it is not necessarily the first hunter to find the station who wins the hunt.



But let's get back to the beginning. After taking all odometer readings and making sure everybody knows the rules, the hidden transmitter crew takes off. The rest of the gang hang about, ragchewing on the chosen frequency, until finally the hidden transmitter comes back on the air to say he is indeed hidden. Direction finders bear on him during this first transmission and, when finished, all mobiles take off -- no doubt in different directions. From then on, it's hide and seek. There is no chatter on the frequency and the hidden transmitter makes no transmissions unless requested to do so, and then only when the requester identifies himself so he can be assessed points. The question then becomes: is it better to proceed rapidly in what you feel sure is the right direction and then wait until someone else makes the request, or proceed a short distance and make the request yourself to verify your initial reading? Either way, you can do the wrong thing, and perhaps be assessed excess mileage points as well as the points for making the request, while a hunter who remains silent may benefit from your request and find himself practically home free. The hunter must constantly balance his need for a bearing transmission, the point penalty for same, the possibility of excess mileage and the probability (or hope) that someone else will soon call for a bearing.

A "must" rule for these hunts is that the hidden rig must be on public property, or at least on the property of someone who has given his assent (knowing precisely what he is in for!), and rules must strictly forbid trespassing. The hidden rig need not be a mobile. Also, bearing transmissions should be kept the same length; thirty seconds is a good standard. Other rules might have to do with traffic violations, crossing private property, causing interference, and other discrepancies that will come up from time to time.

The winner is the one who finds the hidden transmitter with the fewest points assessed against him.

HAMFESTS

Usually, a "hamfest" is a smaller type of amateur get-together conducted formally but can be ARRL sanctioned as are *conventions*, bearing the League's name. Examples: Podunk Amateur Radio Club Annual Hamfest. Central Division ARRL Convention. However, there are large hamfests and small conventions, and neither the word "Hamfest" or "Convention" bears any kind of copyright. Use of the letters ARRL in the name of the event is restricted to official ARRL conventions and hamfests.

Headquarters maintains a register of all coming hamfests and conventions, and publishes each month in QST info (as given to us by the sponsoring club or group) on hamfests scheduled that month. If your club intends sponsoring a hamfest or convention, it is a good idea to check out the proposed date with us first; there may be another club in your area planning to put one on the same date and the conflict would adversely affect the attendance of both.

Official ARRL conventions/hamfests are usually sponsored by a federation or group of affiliated clubs, and require coordination with the director of the division concerned and approval by the ARRL Executive Committee. For further information on the procedures

involved, contact your ARRL director or the headquarters. Our information here will be devoted to the practical aspects of sponsorship of a comparatively small hamfest by an affiliated club.

While initial enthusiasm may be shown by the club as a whole, 90% of the work winds up being done by a small handful of the members. Nevertheless, the more members who participate, the less will be the burden on each member. There is a lot to be done and usually things don't go along as smoothly as expected.

Because the only real difference between a hamfest and a convention is in size and scope, most of the general principles or organization of both are outlined fully in the ARRL brochure on convention organization, available on request. Such things as selection of a date, location, prizes, organization of a program, banquet or barbecue, registration, ticketing, etc., are fully covered and apply to both. The so-called "hamfest" is usually limited to a couple of hundred attendees or less, is much less formal, has more of a "fun" program and draws its attendance more from the local group than does the formal convention. Often it is held outdoors, picnic-style, sometimes on a bring-the-family-and-feed yourselves basis. Outdoor locations are much easier to find; an area of a public park can often be reserved, or one of the members may have a large enough yard or other outdoor property to accommodate the expected crowd. The program has fewer speakers, more athletic events.

Most indoor hamfests are enlarged banquets, held in a motel or restaurant. Many of these are put on annually by one of the larger or more affluent clubs in the area and some of them attract a quite large crowd. The program usually consists of a number of speakers on various amateur subjects, and specialist groups usually gather at tables set aside for them by one or more of their leaders. Indoor hamfests usually have some local dealer representation but nothing compared with the elaborate industry displays set up at ARRL conventions, and some hamfests dispense with this feature altogether. If your club has the required organizational talent, an occasional hamfest will help keep up interest and keep the club in the limelight of area amateur activities. Before tackling a convention, be sure to get a copy of the ARRL brochure on this subject.

TRAINING PROGRAM

Every club needs a training program. For a club to continue a level of high activity, new blood is needed every so often. Elect or choose an Education Officer to write us for our lesson plans which include handouts, charts, suggested demonstrations, slide/tapes, films, quizzes, suggested discussions, and all kinds of good ideas from where to hold classes to what antenna to put up after that ticket finally arrives. As long as this Education Officer has enthusiasm to add to these materials, he's all set. He's all set to help the club, help amateur radio and to be rewarded when he hears his new Novices on the air. More and more clubs are holding several classes per year and have a full-time volunteer examiner.

For further ideas, ARRL has a bi-monthly *Instructor Newsletter* and a regular column in *Radio Club News*, a quarterly bulletin going to clubs.

ENTERTAINMENT

Besides films and slide/tapes on basic electronics, there are slide shows for entertainment purposes and training for already licensed hams, such as on the National Traffic System. There are films on more advanced topics such as repairing printed circuits. Get

your Program Chairperson to write for the list and request sheets, and CT-8 for more program ideas.

Reactivation of a Radio Club: League files are full of records of clubs which formed, affiliated and then became inactive. These clubs are not dis-affiliated; the only way that can happen is for the club to officially disband. Thus it is often far easier to reactivate an inactive club than to start from scratch.

The causes of inactivity are many, but the most common one is a year with a poor slate of officers. Bulletins are not put out on time, meetings are postponed and cancelled and contact between members stops. As soon as this happens, the club is in trouble, as regular correspondence and physical contact between members is essential for a healthy club.

So how to get things going again? The procedure is very similar to that of forming a new club from scratch, except that details such as the constitution, club name, etc. are already done. The first meeting can be to elect officers and reorganize, with little time wasted on formalities. Notify us and we'll send the questionnaire to be filled out and returned. That's it.

Again, publicity and planning are the keys to reactivation. The same efforts for contacting potential members should be taken as explained under formation of a club. Members of the former club may be more skeptical about success, and a well-planned series of programs and low dues will help pull these former members back to the club.

The important part of reactivating a club is to ensure that it will not become inactive again. Try to determine why the club members stopped coming. Often the club will have faded over the summer, and failed to get moving in the fall. Thus a summer program and a vigorous fall campaign for membership can work wonders.

Summer tends to be a slack time in amateur radio, thanks to vacation schedules, etc. However, it is the ideal time for such activities as Field Day, VHF QSO party expeditions, fox hunts, and club picnics.

A CLUB BULLETIN?

What with all the duplicator facilities available these days in even small business concerns, not to mention schools, libraries, and churches, many clubs are finding it possible to get out club bulletins who could never do so before. But you still need someone to write it, edit it and organize it. In a small club in which members see each other fairly often, a bulletin is of less interest than in a large club in which members often don't see each other months at a time. Assuming, however, that someone is available to write, edit and/or organize a club sheet, there is nothing like it to keep members in touch with each other and keep up interest.

If you'd like to see samples of other clubs' bulletins, let us know. Also watch for "Writer's Cramp," a column for bulletin editors, in each issue of *Radio Club News*, a quarterly bulletin going to affiliated clubs.



Mechanics. Mechanically speaking, the editor or someone he can con into doing the typing, can type the original at home and then have duplicator copies made for mailing out. Duplicating can be done at a nominal cost at most libraries, but even better, at a place of business where it can sometimes be done for free or for a very nominal fee, say about 10c for each page. Photo-offset is a bit more expensive, but not appreciably so and a really nice-looking job can be done, and artwork and photos reproduce beautifully using this method. The test and artwork are laid out on a 11-3/8" by 14-1/2" sheet, which when photographed and printed using pica type will produce a clear, readable 8-1/2" x 11" paper. One side of one sheet is usually enough copy. Photo-reduction increases clarity as it reduces type size, so pica type makes a good, readable bulletin; even elite type is readable for all but the weakest-eyed.

For headlines and headings, transfer letters are available very reasonably for dressing up a bulletin; they require no draftsman, yet are very neat and professional-looking. They come in various sizes and type styles and are definitely worth looking into at your local stationery store.

Of course there are still the older methods of mimeograph, ditto, litho, etc. -- and some clubs even go to regular compository printing. Machines for these older methods are often available second hand at quite reasonable prices as industrial and other firms adopt the newer methods. The disadvantage is that special materials must be purchased and stored, as well as the apparatus itself, and someone in the club must possess the know-how to operate it.

There is a book in print written by K0NL entitled "The Club Paper," which covers just about every aspect of putting out such a sheet. Published by the Amateur Radio News Service and printed by K0NL, it's definitely worth having. For information, contact the Secretary, Amateur Radio News Service, 2225 Mt. Vernon Avenue N.E., Canton, Ohio 44708.

Content. Most of the above information relates to the mechanics of putting out your club paper. This is really only half the job, and sometimes the easier half. Someone also has to decide on its content and do the writing -- an editor, in other words. One club secretary refers to the editor of the club paper as being "a whole lot of things no real person is, therefore you just lean on some guy who shows the slightest sign that he might go ahead and get his hands dirty and do it." In other words, it's a rare club who has a man who can do the job without some energetic assistance and cooperation from the membership. Even if you have someone with better than average writing ability, he can't supply all the contents, issue after issue. What contents? A well-balanced bulletin will present a diet of items such as a brief resume of what went on at the latest meeting, member operating activities, a biography of one of the members, latest news from ARRL, announcement and exhortation for members



to participate in upcoming events, announcement of planned meeting programs or other planned activities, a technical presentation of some kind (keep it simple and practical), a column of humor if you have a funny man, a cartoon or photo or two and if space permits ads for disposition of member equipment or for gear wanted. Some bulletins also contain local dealer ads which are paid for and help defray the cost of publication. About the only thing the editor would write himself (although he should edit *all* the material) is an editorial for each issue commenting philosophically on issues of the day, either local or universal ones.

TVI AND BCI

A TVI and BCI committee is a most useful adjunct to assist members and other local amateurs who are in trouble with neighbors. FCC will cooperate with such committees, even officially recognize them and refer people with interference complaints to them. There are also circulars available both for the person being interfered with and for the interferer. The former does an excellent job of explaining to the average TV-looker why he is receiving interference which perhaps is not the fault of the amateur. The club can help by demonstrating the effect of lowpass (for the amateur) and hi-pass (for the BCI or TVI) filters, by advising the amateur how best to shield his transmitter or otherwise reduce harmonic emission, and by taking some of the neighborhood relations problems off his shoulders. The complainant also will feel assured that his interests are being protected through action by such a committee.

CERTIFICATES AND CONTESTS

There are two types of certificates and contests that can be bestowed on behalf of the club. One type is intra-club, the other encompasses all amateurs, club members or not, who are interested in participating.

Staying within the club, some kind of honor can be bestowed on the member judged to have done the most for the club during a just-passed calendar year, or for the most exemplary operating procedure, or for homebrew equipment. Intra-club contests can be conducted either on a one-shot or continuing basis. A low-power or miles-per-watt contest makes a good continuing one, and club recognition can be bestowed on high scorers in ARRL or other nationwide contests as well.

Many clubs seek publicity in the field by making available a certificate for any amateur working a certain number of club members, but there are so many of these that the field is nearly saturated with them. A better way of calling the club's existence to the amateur fraternity in general is to sponsor a contest in which amateurs in a certain area or throughout the world may work club members for credit, or work amateurs within a certain county or state for credit toward a certificate. Such



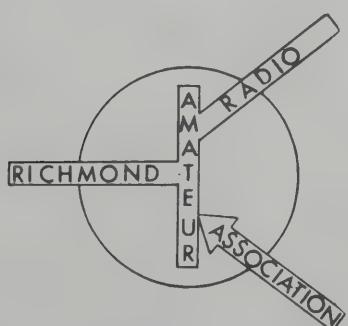
contests are announced regularly in QST and other amateur publications and make good hunting for certificate-hunters.

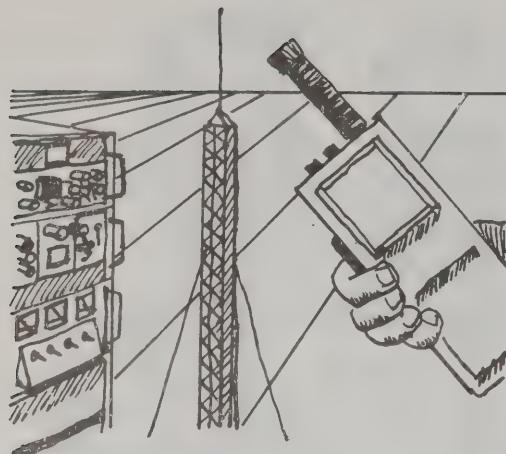
FEDERATIONS AND COUNCILS

Large city clubs sometimes have a rough "go" of it these days, because there are so many hams and their interests are so greatly diversified. There has been more of a tendency for amateurs to form clubs along special interest lines, or to form local general-interest clubs along suburban community lines. This often results in each large city or heavily-populated metropolitan area having a number of different smaller clubs. The number of 100-200-member clubs is declining; that large a group now appears to be unwieldy and often unmanageable.

But there are purposes for which it is desirable to get all amateurs in an area working together, and for such purposes it has become customary to form federations of clubs or club councils -- for example, to plan for a large convention, or to set up citywide or area-wide plans for emergency communication. Such federations or councils are usually ramrodded by the larger, more influential or more active club in the area. The usual method is to invite a representative of each club in the area to attend an organization meeting for formation of the federation.

In such a group, each club usually has one vote, regardless of the number of delegates. Customarily, meetings are held quarterly or semi-annually or as often as mutual problems exist which need mutual action. The federation usually elects officers from among the delegates, to serve for a one- or two-year term. While most of its internal procedures are similar to those of local or special-interest groups, its activities encompass a much wider geographical area and greater scope in terms of mutual interest. That is, a DX club will limit its activities to DX, a local club to activities of its members or encompassing the local area, but a federation or council will deal with matters which transcend activity limitations and/or local geographical considerations.





SUPPORT THE REPEATER YOU USE.

A Special Section for Repeater Clubs:

DUES AND FINANCES

Each repeater club has specific needs, and the financing program will have to be tailored to each situation. Some guidelines, however, are necessary if the club is not to falter. If the standing-committee system is employed, a finance committee is certainly desired. This group should consist of the club treasurer as well as a member or two from the technical committee. This group of amateurs is charged with the responsibility for accurately estimating the cost to operate the repeater and accessories, along with other incidentals, such as insurance, license fees, telephone service, rent, routine maintenance, and possible equipment updating. It is necessary to determine at the outset how the club is to acquire the revenue to pay the bills. If the number of club members is high, and the cost of repeater operation is reasonable, each member may be charged (in terms of dues) an equal share of the duty. Any additional funds raised by increased membership can be applied to the following year cost estimate (for a reduction in dues) or can be held in escrow for emergency. If the dues program is broken down into a quarterly plan, the finance committee can make adjustments in dues according to an updated plan developed during the operating season. The most important point here is that all members should pay an equal share, and that the amount of the dues should not exceed what most members are willing to pay. On the same hand, there is no reason the treasurer should pay out of his pocket for bills which the club treasury is not prepared to cover.

There is always some question as to the amount of dues that should be collected. It should be pointed out here that a large treasury is not necessary. Proper planning of repeater finances will allow the treasury to break even at the end of the year. If the treasury falls short, services of the repeater are compromised (or someone is paying out of his pocket!). If there is an overflow (allowing for small reserve) the members may have been overcharged during the year and objections (along with discontent) may be voiced.

Nonpaying members must be dealt with in a very diplomatic manner. The easier way to handle this facet of club operation is to insert specific rules about dues in the

by-laws. Provisions for action against members who become too far delinquent is desirable.

The costs for running a repeater can run into the hundreds and perhaps as much as a thousand dollars per year. If the membership is somewhat limited, the donation per member can get substantial. In some cases fund raising events to help bolster the treasury are helpful. Any club officer with imagination can develop several ways of generating funds. Auctions, prize drawings, donations, and social affairs -- all can be used as a method for providing supporting income. For many amateurs, taking a "chance" on a door prize, or attending a social affair run by the club is a much better expenditure than just paying out dues money for which there is no immediate or direct benefit.

OPEN AND CLOSED REPEATERS

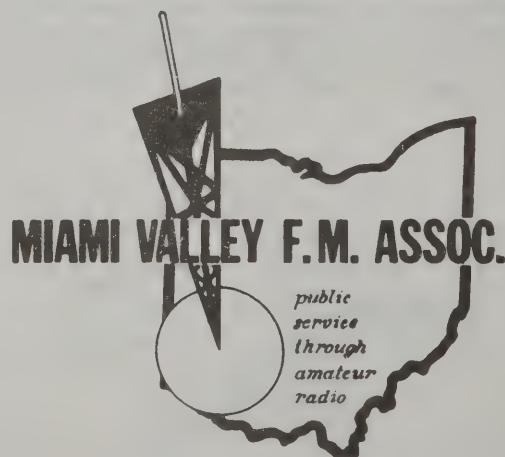
Most repeater clubs will operate what is referred to as an "open" machine. Any open repeater is one which can be activated by anyone having the capability of transmitting on the repeater input frequency and receiving on the repeater output channel. Crystal-controlled receivers and transmitters are used for convenience and accuracy (or dependability) in determining the operating frequency.

The term "closed" refers to repeaters which require special methods of activating the input. Generally, a special tone on the repeater input frequency is required. The technical aspects of this type of operation are covered in "FM AND REPEATERS FOR THE RADIO AMATEUR," an ARRL publication.

From the club point of view, there are several advantages to the "open" type of operation. Membership will not be limited to a few, but will encourage newcomers to become active with the local repeater and of course, eventually join the club. A "closed" repeater discourages new members.

Since the main function of a repeater club is to keep a repeater operating, it is understandable that the main concern of the club is to finance the operation. The larger the membership, the less the cost to the individual member. In a "closed" repeater setup, the membership will be limited and the cost of operation per member may be somewhat higher.

A closed repeater has the advantage of limiting the number of participants to a relatively small figure. The purpose for limited activity is usually based on the experimental aspect of operation in that a closed repeater group could be testing concepts, propagation, or any number of other specialized techniques. These experiments could be hampered from random use by amateurs not interested in the specific operation.



INSTRUCTOR'S NEWSLETTER

issue number 16

sept 1980

TRAINING PROGRAMS MANAGER,
I/N EDITOR - BILL GRIM, WØMHK
CLUB & TRAINING MANAGER,
STEVE PLACE, WB1EYI

AMERICAN RADIO RELAY LEAGUE
225 MAIN STREET
NEWINGTON, CONNECTICUT
06111



N3DR accepts Brier Award from Atlantic Division Director Bieberman with PA. Sec. of Educ. and students at the presentation. Photo courtesy N3ANY

N3DR CHOSEN FOR THE BRIER AWARD

Dr. Arthur R. Smith, N3DR, was the recipient of the 1979 Herb S. Brier, W9AD, Memorial Award. This award honors an outstanding instructor from the U.S. and Canada each year. Atlantic Division Director Jesse Bieberman presented Art with his plaque in a ceremony recently near Philadelphia.

N3DR's training program has graduated over 1000 radio amateurs in a period of less than 4 years! All classes of licenses are included in this total. His former students, many of them Extra Class licensees, assist him in conducting his code and theory lessons.

Runners up for this year's award receiving certificate of merit included: Les Taylor, WAØQIT, Larry Henley, W7PFF, William Arcieri, KØPMO, and Charles Rodgers, WØQQN. Dedication and accomplishments highlighted the profiles of these nominees.

Congratulations to all of you who were nominated for the award. Thanks, also, to those individuals who took the time and made the effort to nominate someone for this honor. Let's hope that we all can achieve and maintain their level of proficiency and commitment.

BRIER AWARD NOMINATIONS SOUGHT

Nominations for the 1980 Herb S. Brier Award for outstanding instruction in the field of Amateur Radio must be received by November 15, 1980. The award is administered by ARRL in cooperation with the Lake County Indiana ARC. After nominations are processed, impartial judges at headquarters will select the winner and any honorable mentions.

As instructors, this might be the ideal time to give recognition to the Elmer who started you in the hobby. Or possibly you're familiar with a nearby fellow teacher that has made exceptional contributions to those wishing to become hams or upgrade. Some excellent teaching is taking place in both the U.S. and Canada. Let's give these fine people the attention and bi-national recognition they deserve.

Send your nominations to the Herb S. Brier Award Committee in care of the Club and Training Department at ARRL Headquarters.

INSTRUCTOR'S-HOW TO GET ALL YOU NEED!

Wish there were a simple, easy answer to this problem. You might be able to tap some educational potential floating around your vicinity by asking a fellow amateur who has exceptional knowledge in an area you would like taught in class to make a single "guest" appearance. Ask this person if he would merely teach one lesson in an area that he is so well qualified to handle (often by his own humble admission in an unguarded moment!)

Many people with latent teaching abilities shy away from the classroom because of the long-term commitment that is often necessary. By asking a person to teach one lesson, he will be more inclined to make the solo attempt than if he is asked to conduct the entire course. Even if he is not willing to go any further than this one lesson, you have at least nudged him into a classroom situation, given the students a change of face and presented them with a superior treatment of a topic.

Who knows? Maybe your next guest teacher/demonstrator might turn into a full time registered instructor!

ANNOUNCING IN/LESSON COMPETITION

Tired of Sweepstakes and DX Competition? Well, here's a new twist to an old idea. We're looking for new lesson used in Amateur Radio instruction. Anyone involved in teaching has a "pet" lesson or two that are exceptionally pleasurable to wade into with a class.

There's a good chance that this lesson is original or a significantly different variation of an old module. Some great teaching ideas are borrowed from other instructors and shaped to one's personal needs. These are the types of creations we're looking for.

As we suspect that calculated bribery might be very effective in shaking loose some of your genius, the Club and Training Department announces the new IN/Lesson competition!

Each future Instructor's Newsletter will contain a new winning lesson based on entries received since publication of the last Newsletter. The winning author will be awarded a cloth-bound edition of the Radio Amateur's Handbook, a welcome addition to anyone's library.

Guidelines for entering are simple. Lessons should have no more than 500 words of text (about two double-spaced typed pages, although if legible, it does not have to be typed) excluding any illustrations. List any teaching materials necessary, like parts or equipment if applicable, and details needed to present the lesson. Lesson/module outlines found in ARRL Instructor's Guides might be good models to follow, or use "Any Dummy's Dummy Antenna" in this issue as an example.

Our first winner and lesson will be carried in the next issue of IN. Lessons should be submitted to the C & T Department here in Newington. As none will be returned, keep a copy for yourself. Club and Training will be responsible for judging. Deadline for first entries will be October 15, 1980.

No specific topic will be required on this first go around. In the future, however, we may specify particular subject areas. Your suggestions here will be welcomed as well. In what areas do you have the greatest difficulty; we would especially like to use these as themes for future competition.

Take pen or typewriter in hand(s) and get your entry in soon. You might even find your lesson featured in the "In Training" column of QST!

Good Luck!

NOVICE EXAM CODE REQUIREMENT

Many of you have asked about the status of the sending test for the Novice class license. Confusion stems from the FCC's suspension of the sending test on exams involving licenses above that of Novice.

The Novice code exam still requires both the sending and receiving tests at five wpm. Keep those straight keys polished and properly adjusted for Novice applicants!

WHERE DO I START.....?????

Have no fear! ARRL is with you all the way to help with teaching from the new FCC Study Guides.

First of all, don't push the panic button. Regardless of what class of license you're going to teach, at least some of the information is the same. Besides, one half of the test is exactly the same—code speed requirements have not changed from the Novice through Extra.

Get out your March QST, page 55, and May QST, page 64. Be sure you have some familiarity or experience with the topics listed in the new FCC Study Guides.

Most of the Novice material you have will still fit the new Novice syllabus. A good deal of Novice material has been moved up to the General Class license. More common terminology and operating topics appear in the General syllabus now.

You Advanced/Extra Class instructors will have to rearrange a few areas of study, refresh your memories and open a Handbook and possibly other sources to delve into some new subject matter. Newer technology is reflected in the newer exams. Don't be surprised to see more solid-state theory and advanced communications techniques.

All in all, a little wise preparation beforehand should result in success for you. Use this opportunity to innovate and to pump some new material into your curriculum.



How many of us began our "Careers" with Crystal Radios?

Photo Courtesy W2MAS

HAMFESTS AND EXAMS

Lack of money and efforts to cut costs were again the familiar FCC themes on this topic. According to latest information, clubs can pay for expenses incurred by FCC employees in traveling to club or exam sites. One stipulation is that no sharing of expenses between the FCC and the sponsoring organization may take place. The other is that only clubs or organizations that are tax-exempt as defined by IRS statutes will be eligible to sponsor and underwrite the expenses.

Although the new ruling is not as liberal as the old, thousands of radio amateurs should once again have an additional opportunity to upgrade through this route.

ECONOMICS HALTS OVERSEAS EXAMS

FCC Commercial and Amateur Radio examinations will no longer be given in Europe. Ramstein AFB and the city of Ausbury in West Germany have been the exam sites for many military personnel over the years.

Government cost-consciousness was the major reason given for termination of the tests. ARRL Washington Area Coordinator, Perry Williams, felt prospects were not bright for the return of these overseas upgrading opportunities in the near future.

OPENINGS AT HEADQUARTERS

The ARRL is seeking qualified applicants to fill positions in Newington. Employment opportunities are in the Club and Training Department and the Technical Department.

An OSCAR Education person is sought by the Club and Training Department to administer and expand the present satellite education program in science classrooms around the country. Revision of curriculum, creation of new satellite lab modules and OSCAR Newsletter editing and general writing ability include major responsibilities.

Experience in science education is preferred as well as experience in science curriculum development and OSCAR operation. A General Class license or higher is needed.

An Assistant Technical Editor is one of the positions presently open in the Technical Department. Formal education and practical engineering experience are important. Writing experience in technical areas and an Amateur Radio license are necessary. Some duties include: article editing and writing, and assorted departmental assignments.

A Laboratory Technician is also needed in the Technical Department. No writing experience is required, and an Amateur Radio license is preferred. Primary duties include: building circuits designed by technical editors, troubleshooting and repairing, and maintenance of lab equipment and lab materials.

Contact Steve Place, Manager of Club and Training Department, or Doug DeMaw, Manager of the Technical Department, for further details.

NEW CODE TEST TO DEBUT

The FCC has been concerned about its multiple-choice code test format for some time now. Cheating, unfortunately, has been a definite problem.

To remedy this problem, Atlanta and Denver were the scenes of an experimental type of code test run this past February. With promising results recorded from the new exam, the FCC will initiate such a test around October.

The test will still consist of ten questions based on a typical Amateur Radio QSO. The applicant will then be required to answer the questions by filling in the correct answer. Multiple-choice questions will no longer be used in FCC code exams. (No change is to be made in the written test.)

FCC exam creator, Jay Jackson, feels the new test will still give an advantage to the marginal code copier as compared to putting down a perfect string of copied text on paper.

Also mentioned by Jackson was the possibility of changing the code test passing requirement from 80% to 70%. No final decision has been made on this subject, but be aware of this possible future change.

FIRST FCC SPANISH EXAM IN USE

The first of what might be a complete set of Spanish language FCC exams is now available. Any examinee who does not already have a Novice class license may request a combination Novice/Technician-General written exam in Spanish. The exam consists of 70 questions covering Elements 2 and 3 of the FCC Study Guides. It can not be requested through the mail.

Depending upon costs and time, other Spanish language examinations will be developed and administered. Both ARRL and SIRA, a local Miami radio amateur group, petitioned for the new tests.

ARTS ANSWERS QUESTIONS

There's a lot to be gained through troubleshooting and persevering when the going gets tough. But when you "hit the wall" and simply can't go any further - ARTS may be the answer.

ARTS was started by a few hams who saw a need for on-the-air discussion and exploration of technical problems and topics. Anyone can participate in the net, and those involved (including WB2JXF, WA2KTN, AA3L, W3DMW and N1NBQ among others) invite any amateurs with questions or know-how to take part in the net.

Meeting time for the group is 7:30 EDT, Monday through Friday at 7.245 MHz, plus or minus QRM. An additional cw frequency of 7.125 MHz is sometimes used.

Students and instructors alike can benefit from this worthwhile venture. The group is especially looking for a "mentor" with expertise in the area of propagation.

ANNOUNCING IN/LESSON COMPETITION

Tired of Sweepstakes and DX Competition? Well, here's a new twist to an old idea. We're looking for new lesson used in Amateur Radio instruction. Anyone involved in teaching has a "pet" lesson or two that are exceptionally pleasurable to wade into with a class.

There's a good chance that this lesson is original or a significantly different variation of an old module. Some great teaching ideas are borrowed from other instructors and shaped to one's personal needs. These are the types of creations we're looking for.

As we suspect that calculated bribery might be very effective in shaking loose some of your genius, the Club and Training Department announces the new IN/Lesson competition!

Each future Instructor's Newsletter will contain a new winning lesson based on entries received since publication of the last Newsletter. The winning author will be awarded a cloth-bound edition of the Radio Amateur's Handbook, a welcome addition to anyone's library.

Guidelines for entering are simple. Lessons should have no more than 500 words of text (about two double-spaced typed pages, although if legible, it does not have to be typed) excluding any illustrations. List any teaching materials necessary, like parts or equipment if applicable, and details needed to present the lesson. Lesson/module outlines found in ARRL Instructor's Guides might be good models to follow, or use "Any Dummy's Dummy Antenna" in this issue as an example.

Our first winner and lesson will be carried in the next issue of IN. Lessons should be submitted to the C & T Department here in Newington. As none will be returned, keep a copy for yourself. Club and Training will be responsible for judging. Deadline for first entries will be October 15, 1980.

No specific topic will be required on this first go around. In the future, however, we may specify particular subject areas. Your suggestions here will be welcomed as well. In what areas do you have the greatest difficulty; we would especially like to use these as themes for future competition.

Take pen or typewriter in hand(s) and get your entry in soon. You might even find your lesson featured in the "In Training" column of QST!

Good Luck!

NOVICE EXAM CODE REQUIREMENT

Many of you have asked about the status of the sending test for the Novice class license. Confusion stems from the FCC's suspension of the sending test on exams involving licenses above that of Novice.

The Novice code exam still requires both the sending and receiving tests at five wpm. Keep those straight keys polished and properly adjusted for Novice applicants!

WHERE DO I START.....???????

Have no fear! ARRL is with you all the way to help with teaching from the new FCC Study Guides.

First of all, don't push the panic button. Regardless of what class of license you're going to teach, at least some of the information is the same. Besides, one half of the test is exactly the same—code speed requirements have not changed from the Novice through Extra.

Get out your March QST, page 55, and May QST, page 64. Be sure you have some familiarity or experience with the topics listed in the new FCC Study Guides.

Most of the Novice material you have will still fit the new Novice syllabus. A good deal of Novice material has been moved up to the General Class license. More common terminology and operating topics appear in the General syllabus now.

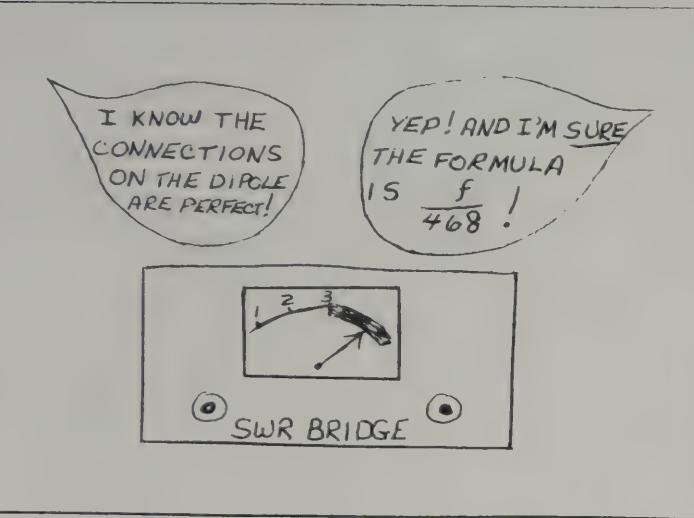
You Advanced/Extra Class instructors will have to rearrange a few areas of study, refresh your memories and open a Handbook and possibly other sources to delve into some new subject matter. Newer technology is reflected in the newer exams. Don't be surprised to see more solid-state theory and advanced communications techniques.

All in all, a little wise preparation beforehand should result in success for you. Use this opportunity to innovate and to pump some new material into your curriculum.



How many of us began our "Careers" with Crystal Radios?

Photo Courtesy W2MAS



CALL SIGNS - WHERE ARE THEY?

The following is a list of the last call signs assigned as of the first of June 1980.

Radio District	Group A	Group B
0	KDØM	KBØPH
1	AK1A	KA1KI
2	KE2W	KB2RX
3	KA3K	KB3KN
4	KY4V	KC4JO
5	KJ5A	KB5ZH
6	KN6F	KD6GV
7	KC7C	KB7NG
8	KE8R	KB8TU
9	KB9I	KB9PH
N. Mariana Is.	AHØA	None
Guam	AH2H	AH2AC
Johnston Is.	None	None
Midway Is.	None	AH4AA
Hawaii	NH6C	AH6CA
Amer. Samoa	AH8A	None
Wake Wilkes Peale	None	None
Alaska	NL7L	AL7BD
Virgin Is.	KP2B	KP2AA
Puerto Rico	NP4C	KP4BN

Radio District	Group C	Group D
0	NØBUS	KAØITT
1	N1BBQ	KA1FNN
2	N2BWS	KA2JOD
3	N3BIO	KA3FWG
4	N4DLJ	KA4PRD
5	N5CFI	KA5JFT
6	N6CYS	KA6LWQ
7	N7BUL	KA7ICG
8	N8BWS	KA8KFR
9	N9BNR	KA9INJ
N. Mariana Is.	KHØAC	WHØAAC
Guam	KH2AK	WH2ACM
Johnston Is.	KH3AA	WH3AAA
Midway Is.	KH4AC	WH4AAE
Hawaii	KH6KA	WH6AME
Amer. Samoa	None	WH8AAI
Wake Wilkes Peale	None	WH9AAA
Alaska	KL7JD	WL7AMS
Virgin Is.	NP2AE	WP2ABZ
Puerto Rico	NP4BE	WP4BHS



INSTRUCTOR'S CHECKLIST FOR FALL CLASSES

If you are preparing to teach an Amateur Radio course this fall, check through the following steps. Are there any ways we can help you with your instructional program?

- 1) Are your public relations announcements posted around town yet?
- 2) If you've never taught a class before, do you need a copy of "How To Teach A Course In Amateur Radio?"
- 3) Have you submitted your name with us as an ARRL registered instructor? If not, and you are a General class licensee or higher, send your name, address, phone number (optional) and what classes you plan to teach, to "Training" in care of the Club and Training Department at ARRL Headquarters.
- 4) If you've recently moved, have you changed your registered instructor's address? If not, you probably received this IN via several post offices. Prospective hams may not be able to get in touch with you, and we may refer the wrong (distant) ones to you.
- 5) Have you registered your class by the type of class license taught, size of the class and beginning and concluding dates of the course? We need the information to ensure that you'll get what you need when you need it.
- 6) Have you ordered materials for teaching in reasonable quantities? Please order no more than one per student.
- 7) Need Instructor Guides for Novice, General and Advanced/Extra presentations? They are not revised yet and cost \$1.50 to defray their expense.
- 8) Have you ordered Novice or General color slide sets? The \$10 deposit is refundable.
- 9) Have you received your film confirmations from ARRL Film Librarian, Cindy Lewandowski, for visual aids? Keep in mind that we honor one request per month with two alternate choices. Early requests are a must!

Refer to "How To Teach A Course..." for additional specifics.

Don't delay! The better you prepare your program of instruction, the more effective your role as teacher will be.

A. V. CORNER - THE OVERHEAD PROJECTOR

You say you're tired of that old blackboard with the "dust-free" chalk piling up on your notes and leaving its telltale track on your clothes well, beg, borrow or "appropriate" an overhead projector from somewhere to help clean up your act and make teaching a bit more enjoyable and effective.

If you are holding your classes in a typical school classroom, you may unwittingly have a machine at your fingertips. Not being that fortunate, you might be able to discover one by asking around a little (don't confuse an opaque projector with an overhead!). They come in various shapes and weights, but all can be valuable instructional tools.

If you're planning to use one, be sure you have the proper overhead pencils or pens necessary to write on plastic. Some machines come with a long sheet of plastic on rollers that can be continuously wound to accommodate more writing. Pieces of plastic the size of the projection area can be made from a heavier gauge of transparent plastic or purchased for a reasonable price. Some "standard" plates can be left as-is more or less permanently. You'll need a soft cloth for erasure. Special colored pens made for the overhead will reproduce colors faithfully for added emphasis or differentiation such as in graphs.

Before using the machine for the first time, be sure to practice focusing on the wall area or screen you will be using. Besides adjusting the focusing control (that's probably the only control on the machine), you might have to physically move the projector to a place where it reproduces the image in the right size. Check to see if all of your students can see well before you begin to use the overhead.

Now for the fun part! What do you do with the thing?

Here are some tips:

- 1) Use the overhead as a change of pace or replacement for blackboard work. By darkening the room and projecting your work, students might be more attentive and be more willing to call out questions. Lights on presentations work fine too.
- 2) You can prepare your lessons or parts of lessons on the plastic sheets ahead of time. They can be better prepared and can be projected rapidly without need to recopy the information at a blackboard.
- 3) Instead of being behind a desk or physically apart from the students, you can be much closer to them and thereby get a better sense of how effective your efforts are.
- 4) Save a few bucks. Quizzes can be quickly administered without the need to duplicate paper copies of the questions. The same holds true for practice exercises.
- 5) Graphs seem to lend themselves to this type of presentation. Overlays can be continually stacked one upon another to show progressive growth or decline in a concept. Similarly, more complex graphics can be carefully and neatly prepared in advance.

- 6) If accessible, proper duplicating equipment can reproduce most anything from print to a transparency. Even complex schematics could be made quickly this way and could be re-used.
- 7) As with any teaching tool, use this as a tool. Don't rely so heavily on the technique or machine that it becomes a barrier between you and your students. A change of pace can be great. And anything that helps to clarify your material is worth the effort. But DON'T sacrifice the close personal contact that will really ensure success.

Don't shy away from the opportunity to use one of these machines if it's available. You could become very proficient at its use and improve your teaching technique at the same time.



USE BASIC RADIO SERIES

If you thumb through your old QST's you'll probably notice quite a reservoir of information in the Basic Amateur Radio series. These articles have been running now for over two years. A variety of topics have been explored. These could be of value in your classroom instruction.

Notice that the articles cover concepts as well as projects. Some good outlines for topics you expect to teach could be made from these past contributions to QST.

Projects abound in these articles: Many pieces of equipment and accessories from tested circuits are represented. Parts, layouts and circuit boards are usually readily available, although etching a batch of Universal Boards for class projects at minimal cost or free for student use would be a slick club project.

If you find articles in the series that are of particular use to instructors, drop us a line and let us know of your experiences so they may be shared with others.

ANY DUMMY'S DUMMY ANTENNA

Need a good, simple project to perk up a winter evening's instruction? Consider this mini-project. Most information for it was taken from page 169 of Understanding Amateur Radio. Refer to it for more details.

Purpose

1. To use an everyday item as an antenna.
2. To visually observe power lighting the bulb.
3. To show dissipation of power through heat by warmth of the bulb.

Materials Needed

Short length of coax, PL-259, lamp socket, bulb of appropriate wattage, base mounting board, wood screws, knife, ruler (for dressing coax), and soldering materials.

Training Points/Instructor's Tips

1. Give hands on experience at dressing and soldering coaxial connectors. (Nip those sloppy soldering techniques in the bud!)
2. Parts should be easily available and inexpensive.
3. A rudimentary but functional station accessory is the result.

4. The project can be completed in one night.
5. The project can be used in conjunction with a power formula, wattmeter demonstration, operating courtesy, etc.

Mold and shape the project to your instructional aims. Tell us how you used it and with what success!

FILE FOR EXAM APPOINTMENTS EARLY!

Check your calendar carefully if you plan to upgrade at FCC examination points which require appointments. Applications for appointments must be received at FCC Field Offices by the first of the month!

Failure to file in time will not only result in extra inquiries to the FCC, but disappointment for the applicant. Being refused admission to a test after long, sincere hours of study is very frustrating.

Early application before the first of the month should ensure your place at exam time, as well as allow sufficient time for reapplication if any Form 610 problems surface.

AMERICAN RADIO RELAY LEAGUE
225 MAIN STREET
NEWINGTON, CONNECTICUT 06111

NON-PROFIT ORGANIZATION U.S. POSTAGE PAID Hartford, Conn. Permit 2929

THE AMERICAN RADIO RELAY LEAGUE, INC.

ADMINISTRATIVE HEADQUARTERS NEWINGTON, CONNECTICUT, U. S. A. 06111

To Amateur Radio Clubs:

QST
OFFICIAL JOURNAL

Effective with the dues increase July 1, 1981, the club may now keep \$2.00 for its treasury for each regular new membership or regular membership renewal submitted through the club.

Here are the details. The individual club member pays the club treasurer or other officer the regular annual ARRL dues of \$25, or \$30 in Canada, (or the special age-65 and over or age 17 and under rate if the member requests and provides proper documentation). The officer forwards \$23 (\$28 in Canada) for each membership taken at the full rate. \$2 is retained for the club treasury for each regular membership outlined above. Any number of memberships may be submitted in this manner. Please indicate whether each membership sent to us is new, a renewal or an extension of an existing membership.

When a multiple-year membership is sent through an affiliated club, the amount retained by the club for handling is \$2 per membership regardless of the number of years being entered. For example, a member wishes to renew for 3 years. He pays the 3 year multiple year rate of \$72. \$2 goes to the club treasury and \$70 is remitted to headquarters.

The special club offer does not apply to Life memberships (or payments made toward Life membership on the quarterly payment plan).

Any member of the immediate family (i.e., husband, wife, brother, sister, son, daughter, father or mother) of an ARRL member, and living at the same address, may also become a League member, without QST, at the special rate of \$2.00 per year. Such family membership must run concurrently with that of the regular member receiving QST, and is not subject to the special club offer.

IMPORTANT: To maintain continuity of membership, which is important since four years of continuous membership is required of candidates of ARRL Director and Vice-Director, renewals should be submitted well in advance of expiration. Membership records are based on the date of receipt at headquarters, and a lapse occurs if a renewal is not received prior to expiration, or within the grace period of 30 days. Don't let a member be penalized inadvertently by allowing his membership to lapse.

Last but not least, 100% ARRL membership entitles each affiliated club to special recognition - an attractive certificate.

Every ham needs an amateur radio club and the League. Make joint membership a continuing club project!

Fraternally yours,



John H. Nelson, W1GNC
Circulation Manager

JHN:maty

HAMFESTS AND EXAMS

Lack of money and efforts to cut costs were again the familiar FCC themes on this topic. According to latest information, clubs can pay for expenses incurred by FCC employees in traveling to club or exam sites. One stipulation is that no sharing of expenses between the FCC and the sponsoring organization may take place. The other is that only clubs or organizations that are tax-exempt as defined by IRS statutes will be eligible to sponsor and underwrite the expenses.

Although the new ruling is not as liberal as the old, thousands of radio amateurs should once again have an additional opportunity to upgrade through this route.

ECONOMICS HALTS OVERSEAS EXAMS

FCC Commercial and Amateur Radio examinations will no longer be given in Europe. Ramstein AFB and the city of Ausbury in West Germany have been the exam sites for many military personnel over the years.

Government cost-consciousness was the major reason given for termination of the tests. ARRL Washington Area Coordinator, Perry Williams, felt prospects were not bright for the return of these overseas upgrading opportunities in the near future.

OPENINGS AT HEADQUARTERS

The ARRL is seeking qualified applicants to fill positions in Newington. Employment opportunities are in the Club and Training Department and the Technical Department.

An OSCAR Education person is sought by the Club and Training Department to administer and expand the present satellite education program in science classrooms around the country. Revision of curriculum, creation of new satellite lab modules and OSCAR Newsletter editing and general writing ability include major responsibilities.

Experience in science education is preferred as well as experience in science curriculum development and OSCAR operation. A General Class license or higher is needed.

An Assistant Technical Editor is one of the positions presently open in the Technical Department. Formal education and practical engineering experience are important. Writing experience in technical areas and an Amateur Radio license are necessary. Some duties include: article editing and writing, and assorted departmental assignments.

A Laboratory Technician is also needed in the Technical Department. No writing experience is required, and an Amateur Radio license is preferred. Primary duties include: building circuits designed by technical editors, troubleshooting and repairing, and maintenance of lab equipment and lab materials.

Contact Steve Place, Manager of Club and Training Department, or Doug DeMaw, Manager of the Technical Department, for further details.

NEW CODE TEST TO DEBUT

The FCC has been concerned about its multiple-choice code test format for some time now. Cheating, unfortunately, has been a definite problem.

To remedy this problem, Atlanta and Denver were the scenes of an experimental type of code test run this past February. With promising results recorded from the new exam, the FCC will initiate such a test around October.

The test will still consist of ten questions based on a typical Amateur Radio QSO. The applicant will then be required to answer the questions by filling in the correct answer. Multiple-choice questions will no longer be used in FCC code exams. (No change is to be made in the written test.)

FCC exam creator, Jay Jackson, feels the new test will still give an advantage to the marginal code copier as compared to putting down a perfect string of copied text on paper.

Also mentioned by Jackson was the possibility of changing the code test passing requirement from 80% to 70%. No final decision has been made on this subject, but be aware of this possible future change.

FIRST FCC SPANISH EXAM IN USE

The first of what might be a complete set of Spanish language FCC exams is now available. Any examinee who does not already have a Novice class license may request a combination Novice/Technician-General written exam in Spanish. The exam consists of 70 questions covering Elements 2 and 3 of the FCC Study Guides. It can not be requested through the mail.

Depending upon costs and time, other Spanish language examinations will be developed and administered. Both ARRL and SIRA, a local Miami radio amateur group, petitioned for the new tests.

ARTS ANSWERS QUESTIONS

There's a lot to be gained through troubleshooting and persevering when the going gets tough. But when you "hit the wall" and simply can't go any further - ARTS may be the answer.

ARTS was started by a few hams who saw a need for on-the-air discussion and exploration of technical problems and topics. Anyone can participate in the net, and those involved (including WB2JXF, WA2KTN, AA3L, W3DMW and N1NBQ among others) invite any amateurs with questions or know-how to take part in the net.

Meeting time for the group is 7:30 EDT, Monday through Friday at 7.245 MHz, plus or minus QRM. An additional cw frequency of 7.125 MHz is sometimes used.

Students and instructors alike can benefit from this worthwhile venture. The group is especially looking for a "mentor" with expertise in the area of propagation.

ANY DUMMY'S DUMMY ANTENNA

Need a good, simple project to perk up a winter evening's instruction? Consider this mini-project. Most information for it was taken from page 169 of Understanding Amateur Radio. Refer to it for more details.

Purpose

1. To use an everyday item as an antenna.
2. To visually observe power lighting the bulb.
3. To show dissipation of power through heat by warmth of the bulb.

Materials Needed

Short length of coax, PL-259, lamp socket, bulb of appropriate wattage, base mounting board, wood screws, knife, ruler (for dressing coax), and soldering materials.

Training Points/Instructor's Tips

1. Give hands on experience at dressing and soldering coaxial connectors. (Nip those sloppy soldering techniques in the bud!)
2. Parts should be easily available and inexpensive.
3. A rudimentary but functional station accessory is the result.

4. The project can be completed in one night.
5. The project can be used in conjunction with a power formula, wattmeter demonstration, operating courtesy, etc.

Mold and shape the project to your instructional aims. Tell us how you used it and with what success!

FILE FOR EXAM APPOINTMENTS EARLY!

Check your calendar carefully if you plan to upgrade at FCC examination points which require appointments. Applications for appointments must be received at FCC Field Offices by the first of the month!

Failure to file in time will not only result in extra inquiries to the FCC, but disappointment for the applicant. Being refused admission to a test after long, sincere hours of study is very frustrating.

Early application before the first of the month should ensure your place at exam time, as well as allow sufficient time for reapplication if any Form 610 problems surface.

NON-PROFIT ORGANIZATION U.S. POSTAGE PAID Hartford, Conn. Permit 2929
--

THE AMERICAN RADIO RELAY LEAGUE, INC.

ADMINISTRATIVE HEADQUARTERS NEWINGTON, CONNECTICUT, U. S. A. 06111

To Amateur Radio Clubs:

QST
OFFICIAL JOURNAL

Effective with the dues increase July 1, 1981, the club may now keep \$2.00 for its treasury for each regular new membership or regular membership renewal submitted through the club.

Here are the details. The individual club member pays the club treasurer or other officer the regular annual ARRL dues of \$25, or \$30 in Canada, (or the special age-65 and over or age 17 and under rate if the member requests and provides proper documentation). The officer forwards \$23 (\$28 in Canada) for each membership taken at the full rate. \$2 is retained for the club treasury for each regular membership outlined above. Any number of memberships may be submitted in this manner. Please indicate whether each membership sent to us is new, a renewal or an extension of an existing membership.

When a multiple-year membership is sent through an affiliated club, the amount retained by the club for handling is \$2 per membership regardless of the number of years being entered. For example, a member wishes to renew for 3 years. He pays the 3 year multiple year rate of \$72. \$2 goes to the club treasury and \$70 is remitted to headquarters.

The special club offer does not apply to Life memberships (or payments made toward Life membership on the quarterly payment plan).

Any member of the immediate family (i.e., husband, wife, brother, sister, son, daughter, father or mother) of an ARRL member, and living at the same address, may also become a League member, without QST, at the special rate of \$2.00 per year. Such family membership must run concurrently with that of the regular member receiving QST, and is not subject to the special club offer.

IMPORTANT: To maintain continuity of membership, which is important since four years of continuous membership is required of candidates of ARRL Director and Vice-Director, renewals should be submitted well in advance of expiration. Membership records are based on the date of receipt at headquarters, and a lapse occurs if a renewal is not received prior to expiration, or within the grace period of 30 days. Don't let a member be penalized inadvertently by allowing his membership to lapse.

Last but not least, 100% ARRL membership entitles each affiliated club to special recognition - an attractive certificate.

Every ham needs an amateur radio club and the League. Make joint membership a continuing club project!

Fraternally yours,


John H. Nelson, W1GNC
Circulation Manager

JHN:maty

**Articles of Association
AND
By-Laws
OF THE
AMERICAN RADIO RELAY
LEAGUE, INC.**



Revised to October 6, 1983

**Articles of Association
By-Laws**

- 1) Rules and Regulations Concerning ARRL Conventions
- 2) Rules and Regulations Concerning Advisory Committees
- 3) Rules and Regulations of the Field Organization
- 4) Rules and Regulations Concerning Affiliated Societies
- 5) Terms and Conditions Governing the Availability of Mailing Lists from Headquarters

INDEX

(A = Articles; BL = By-Laws)

Administration	A6	Membership	
Agenda, Board meeting	BL28	Applications	BL2
Agent	BL33	Classes	BL1
Amendments	A9	Blind	BL7
Applications for membership	BL2	Expiration	BL3
Associate membership	A10, BL1	Family	BL7
Balloting	BL19,20	Life	BL8-10
Board meetings, annual	A4, BL25	Senior	BL5
Board meetings, special	A4, BL15,26	Youth	BL6
Board of Directors	A4, BL14	Membership Affairs Committee	BL39
By-Laws	A9,10	Memberships, League	A10, BL1
Canadian director	BL16	Method of voting	BL19
Canadian Radio Relay League	BL30	Nominations for office	BL18
Classes of membership	A10, BL1	Official publication	BL43
Committees		Officers	A8, BL11-13, BL31-34
Executive	A6, BL42	Organization	A1-4
Management & Finance	BL40	Petition of nomination	BL18
Membership Affairs	BL39	Place, meeting	A4, BL25
Of Tellers	BL20	Plans & Programs Committee	BL38
Plans & Programs	BL38	Political activity prohibited	A13
Standing	BL36,37,41	Power of succession	A5, BL32
Corporate Office	A3	President	A8, BL14,15,31
Deadline, petitions	BL18	Privileges, voting	A10
Director elections	BL18,23	Process, serving of	BL33
Directors	A4	Purpose	A2
Compensation	BL2	QST	BL43
Eligibility	A11	Quorum	BL27
League affiliation	A11, BL13	Recall	BL24
Responsibility of	A4, BL17	Refusal of membership	A10, BL2
Term of office	A4, BL11,23	Repeat election to fill vacancy	BL21
Vacancy	A7	Reports, directors	BL17
Dissolution of the Corporation	A14	Results of elections	BL20
Division, territorial	BL30	Rules of Order	BL29
Dues	BL1,4-7	Secretary	A8, BL33
Election, without opposition	BL19	Special meetings	A4, BL15,26
Elections, director	A4, BL18,23	Special members	BL5-7
Vice Director	A4, BL22	Standing committees	BL36,37
Eligibility for membership	BL1	Status of directors	A4
Eligibility for office	A11, BL13	Status of vice directors	A5
Executive Committee	A6	Succession, power of	A5, BL32
Expiration of membership	BL3	Tellers, Committee of	BL20
Expulsion of member	A10	Territorial divisions	BL30
Full membership	A10, BL1	Term of office,	
General Manager	A12, BL15	Directors	A4, BL23
Governing group	A4, BL15	Officers	A8
Honorary officers	BL7	Treasurer	A8, BL34
Ineligibility for office	A11	Vacancies	A7, BL31
Journal, official	BL43	Vice director	A5, BL22
Life Membership	BL1	Vice president	A8, BL32
Mail vote	A6	Vote, mail	A6
Management & Finance Committee	BL40	Voting privileges	A10
Meetings of Board	A4, BL25,26	Witness, ballot count	BL20

The vertical bars in the left-hand margin indicate changes made since the April 22, 1983, edition of this booklet.

ARTICLES OF ASSOCIATION

Be it known that we, the subscribers, do hereby associate ourselves as a body politic and corporate pursuant to the statute laws of the State of Connecticut regulating the formation and organization of corporations without capital stock and the following are our Articles of Association:

Article 1:

The name of our corporation shall be The American Radio Relay League, Incorporated. Our corporation commenced its corporate existence as the American Radio Relay League, Incorporated, when its Articles of Association were approved by the Secretary of the State of Connecticut on January 29, 1915. The original Articles of Association were subscribed by Hiram Percy Maxim, Clarence D. Tuska and Lawrence A. Howard. The affairs of the corporation have since that time been continuously administered by a Board of Directors selected by the membership.

Article 2:

The purposes for which our corporation is formed are the following: the promotion of interest in amateur radio communication and experimentation; the establishment of amateur radio networks to provide electronic communications in the event of disasters or other emergencies; the furtherance of the public welfare; the advancement of the radio art; the fostering and promotion of noncommercial intercommunication by electronic means throughout the world; the fostering of education in the field of electronic communication; the promotion and conduct of research and development to further the development of electronic communication; the dissemination of technical, educational and scientific information relating to electronic communication; the printing and publishing of documents, books, magazines, newspapers and pamphlets necessary or incidental to any of the above purposes. No part of the assets or income of our corporation shall inure to the benefit of or be distributable to the members, the officers, or any of them, or to other private persons except that our corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth herein.

Article 3:

The principal office of the corporation shall be maintained at 225 Main Street, Newington, Connecticut.

Article 4:

The affairs of the Corporation shall be governed by a Board consisting of sixteen Directors who shall be elected for terms of two years by the members eligible to vote. Eight Directors shall be elected for terms beginning on even-numbered years, and eight Directors shall be elected for terms beginning on odd-numbered years. Election of Directors shall be by mail vote in accordance

with the rules and regulations prescribed by the Board of Directors in the By-Laws. Directors shall be elected to represent specific geographical areas as may from time to time be prescribed by the By-Laws. The Board shall meet twice each year at times and places as provided by the By-Laws. The first meeting shall be called the annual meeting and the second shall be called the second meeting. Special meetings of the Board shall be called by the President upon written request of at least one-half of the membership of the Board as then constituted.

Article 5:

At the time of the election of each Director there shall also be elected a Vice-Director who shall have power of succession to the office of Director as hereinafter prescribed. No person shall be eligible for the office of Vice-Director who does not possess the qualifications herein specified for the office of Director.

Article 6:

During the intervals between meetings of the Board of Directors, the affairs of the Corporation shall be administered by an Executive Committee consisting of the President, four Directors selected by the Board of Directors, and, without vote, the First Vice President and General Manager. The term of office of the Executive Committee members shall be for one year or until their successors are elected. The Executive Committee shall meet at the call of the President, but no less often than quarterly. The Executive Committee may in its discretion submit for determination or decision by members of the Board of Directors by mail vote any proposal pending before the Executive Committee. When such submission is made, it shall be in precise terms embodying the text of the proposed resolution. Such action shall be binding upon the Executive Committee.

Article 7:

A vacancy in the Board of Directors shall be deemed to occur upon the death, resignation, recall, move of permanent residence outside the division from which elected, or refusal to act of any director. Upon the occurrence of such vacancy, the Secretary shall proclaim it and thereafter the duties of the Director shall be assumed by the Vice-Director, and the Vice-Director shall hold the office of Director for the remainder of the term for which he was elected Vice-Director. Should the office of Vice-Director be vacant, the vacancy shall be filled by appointment by the President. The Vice-Director shall also serve as Director at any meeting of the Board of Directors which the Director is unable to attend.

Article 8:

The officers of the Corporation shall be a President, a First Vice President, an International Affairs Vice President, not more than two additional Vice-

Presidents, a Secretary, and a Treasurer, who shall be elected by a majority of the Directors at its annual meeting on even-numbered years.

Article 9:

These articles may be amended by a three-fourths vote of all directors, or, provided due notice of the proposed amendment shall have been placed in the mail to each director at least thirty days in advance, by a two-thirds vote of all directors. The Board of Directors may from time to time adopt By-Laws not inconsistent with the Articles and applicable statutes. By-Laws may be amended by a three-fourths vote of the directors present, or, provided due notice of the proposed amendment shall have been placed in the mail to each director at least thirty days in advance, by a two-thirds vote of all directors. Notices shall be sent by First-Class Mail, and to all directors residing more than 250 miles from Newington, Connecticut, by Air Mail.

Article 10:

The membership of the League shall consist of (a) full members who shall be entitled to all rights and privileges of the League and (b) associate members who shall be entitled to all rights and privileges of the League except the right to vote for Directors and Vice-Directors and the right to hold office. The Board of Directors shall by appropriate By-Laws specify the requirements for membership and classes of membership provided, however, that the Board of Directors shall not terminate or reduce the rights of any member except for the lapse or termination of a condition now required as precedent to the exercise of such rights. Nothing herein contained shall preclude the Board of Directors from expelling a member upon good cause shown and after notice and an opportunity to be heard.

Article 11:

No person shall be eligible for the office of Director, Vice-Director, President, Vice-President, or Treasurer who has not been a Full member of the League for at least four continuous years, and who has not held continuously during that period a valid authorization as a radio amateur in accordance with the applicable laws and regulations of the United States or Canada prevailing at the time of his election and throughout his term of office. No person shall be eligible for, or hold, the office of Director, Vice Director, President or Vice President whose business connections are of such nature that he could gain financially through the shaping of the affairs of the League by the Board, or by the improper exploitation of his office for the furtherance of his own aims or those of his employer. The primary test of eligibility under this Article shall be the freedom from commercial or governmental connections of such nature that his influence in the affairs of the League could be used for his private benefit.

Article 12:

The Board of Directors shall employ a General Manager who shall hold office for a term and upon such compensation as the Board and he may agree upon. The

General Manager shall manage the affairs of the League under the direction of the Board of Directors. He shall be deemed a member of the Board, but without vote. He shall attend all meetings of the Board. He shall collect all monies due the League and turn them over to the Treasurer. He shall certify the accuracy of bills or vouchers on which money is to be paid and shall draw and countersign all checks. He shall have charge of the books and accounts of the League and shall furnish to the Board of Directors from time to time such statements as may be required. He shall conduct the general correspondence of the League and shall keep full records. He shall be in responsible charge, under the Board of Directors, of all property of the League. He shall, under the general direction of the Board of Directors, employ such personnel as may be necessary for the effective accomplishment of the purposes of the League. He shall be the General Manager of League publications. He shall prepare and submit to each annual meeting of the Board of Directors a comprehensive report of the progress and status of the affairs of the League. He shall perform such other duties as may be assigned to him by the Board of Directors. His entire time shall be devoted to the affairs of the League. He shall furnish a bond satisfactory to the Board of Directors, the expense of the same to be borne by the League.

Article 13:

No substantial part of the activities of our corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and our corporation shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of any candidate for public office. Notwithstanding any other provision of these articles, our corporation shall not, except to an insubstantial degree, engage in any activities or exercise any powers that are not in furtherance of the purposes of our corporation.

Article 14:

Upon the dissolution of our corporation, the Board of Directors shall, after paying or making provision for the payment of all of the liabilities of our corporation, dispose of all of the assets of our corporation exclusively for the purposes of our corporation in such manner, or to such organization or organizations organized and operated exclusively for charitable, educational, religious, or scientific purposes as shall at the time qualify as an exempt organization or organizations under Section 501(c)(3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law), as the Board of Directors shall determine. Any such assets not so disposed of shall be disposed of by a court of competent jurisdiction of the county in which the principal office of our corporation is then located, exclusively for such purposes or to such organization or organizations, as said court shall determine, which are organized and operated exclusively for such purposes.

BY-LAWS

Members

1. Pursuant to Article 10 of the Articles of Association, the following membership categories are established:

(a) Full Membership. To be eligible, an applicant must be a resident of the United States, its possessions, the Commonwealth of Puerto Rico, or of Canada, or a United States or Canadian citizen temporarily resident elsewhere, and the holder of an unexpired amateur radio operator's license or reciprocal operating authorization issued by the United States or Canada.

(b) Associate Membership. Any person who is not eligible for Full Membership, but who is interested in amateur radio, is eligible for Associate Membership.

2. Applications for membership shall be submitted to the Secretary. In the case of any applicant whose character, reputation or conduct might make him an undesirable member, the Secretary shall refer the application to the Executive Committee for review; in all other cases, the Secretary shall have the authority to grant membership.

3. The Secretary shall notify members of the expiration of their membership not less than thirty days prior to expiration. In determining eligibility for office, memberships renewed within thirty days of expiration shall be regarded as continuous.

Dues

4. The dues of Full and Associate Members shall be \$25 annually worldwide, payable in advance. For members outside the United States, the General Manager shall assess such additional mailing costs as are consistent with the postal rates for destinations outside the United States. Members choosing to pay dues for more than one year in advance, but for no more than five years, may be entitled to lower rates as determined periodically by the General Manager and as published in *QST*.

5. A member who has reached the age of 65 years may request an annual dues rate equivalent to 80% of the rate set forth in By-Law 4.

6. A member who has not reached the age of 18 years may request an annual dues rate equivalent to 80% of the rate set forth in By-Law 4. This rate shall not be available for Life Membership.

7. The special dues rate of \$2.00 annually, with all membership privileges except the receipt of *QST*, shall apply to any Full or Associate Member who meets either of the following criteria:

(a) is legally blind; or

(b) is the husband or wife, brother or sister, son or daughter, or father or mother of another member who lives at the same address and is either a Life Member or is paying dues in accordance with By-Law 4 or 5.

Life Membership

8. Life Membership in the League is available upon payment of twenty-five times the annual dues rates set forth above.

9. Life Membership is not transferable.

10. Should a Life Member who paid dues at a multiple of the special rate established in By-Law 7 cease to be eligible for the special rate, his membership shall cease and the amount paid shall be creditable toward a Life Membership, including receipt of *QST*, at the then-current rate.

General Provisions as to Officers and Directors

11. Every officer, director and vice-director of the League shall serve and continue in office until his successor shall have been elected and qualified. One or more honorary officers may be elected.

12. All officers, directors and vice-directors shall serve without compensation in any form. This shall not preclude the reimbursement, and the League shall reimburse, the reasonable and necessary travelling expenses of officers and directors from their homes to the place of meeting of the Board of Directors or of the Executive Committee and return to their homes. This section shall not be construed to prevent the employment for agreed compensation, of the Secretary, the Treasurer, and any Vice-President other than the First Vice-President, by the League in other capacities.

13. No person shall be President, Vice-President, Secretary, Treasurer, Director or Vice-Director of the League unless, at the time of nomination, he has reached his 21st birthday and is a Full member of the League and a holder of at least a Technician Class Amateur License or a Canadian Amateur Certificate.

14. The members of the Board of Directors shall be the President, the Vice-Presidents, the Treasurer, one director from each of the several territorial divisions of the League and the General Manager.

15. The President, the Vice Presidents, the Treasurer, and the General Manager shall possess all of the rights and duties of directors save the right to vote and the right to participate in the call of a special meeting of

the Board, as referred to in Article 4 of the Articles of Association, provided, however, that the President shall be required to cast a vote on any matter as to which a tie is found to exist.

16. Without restriction of his rights and duties as prescribed by the Articles of Association, the Canadian Director is requested not to vote on any matter involving recommendations or expressions of attitude concerning the exercise of the power of the Federal Government of the United States of America in the regulation of radio communication, or in matters of purely domestic United States interest.

17. Each director shall keep himself informed as to conditions and activities in his territorial division and as to the needs and desires of the members therein in order that he may faithfully and intelligently represent the true interests of such members. He shall attend all meetings of the Board. At least sixty days prior to each annual meeting of the Board of Directors each director shall file with the Secretary a written report on the status of the affairs of the League in his division, together with a statement of his recommendations as to any actions required for the effective administration of the objectives and affairs of the League.

18. On any date not later than noon of the 20th day of August of any election year in any division, nominating petitions signed by ten or more full members of a division and naming a full member of the division as candidate for director, may be filed with the Secretary. The Secretary shall solicit such petitions in the July and August issue of *QST* in each election year by a notice that will show the name of the incumbent.

19. The Executive Committee shall delete the name of any nominee who may be ineligible to election and the name of any who may withdraw by written communication. The remaining names shall be listed on a ballot, in alphabetical order. If there be but one eligible nominee, the Executive Committee shall declare him elected without balloting by the membership. If there be more than one eligible nominee, then on or before October 1 of each year the Secretary shall send by mail to every person who on the tenth day of September of that year was a full member of the League in the divisions in which elections are being held, a ballot listing the candidates for director in his division, and a return envelope, soliciting a vote for one name. The ballot shall contain a copy of By-Laws 18 and 20.

20. The Executive Committee shall appoint a committee of three tellers including at least one director and shall arrange to have a certified public accountant present to certify the results of the balloting; but any member of the League who shall deliver to the Secretary on or before the first day of October of election year a written petition signed by at least ten full members of a division, stating their desire that he witness the counting by the committee of tellers of the ballots from that division, shall be permitted to do so and shall be

accorded reasonable opportunity to satisfy himself of the correctness of the count reported by the committee. Ballots, to be counted, shall reach the Secretary not later than noon of the twentieth day of November of election year. No outer envelopes marked as containing ballots shall be opened until the meeting of the committee of tellers held for the purpose of counting the ballots. The committee of tellers shall meet at the headquarters office of the League as soon thereafter as possible and in the presence of each other shall open the envelopes containing ballots and shall count the vote, after first eliminating the ballot of anyone disqualified from voting. They shall forthwith prepare and sign in the name of the Executive Committee a report of the results of the vote, declaring duly elected as new directors the candidate in each division receiving the greatest number of votes therein; and they shall turn over all their records and ballots to the Secretary for presentation at the next annual meeting of the Board of Directors.

21. If there be no eligible nominee, the procedure provided for in By-Laws 18, 19 and 20 shall be repeated three months later and if there again be no eligible nominee, the person then holding the office of director shall continue in office (subject to the provisions of Article 7 of the Articles of Association), until the next regular election established by these By-Laws for the division.

22. Simultaneously with each election for director of any division there shall be held an election for vice director of that division. All of the provisions of By-Laws 1, 18, 19 and 20 shall be applicable to the election for vice director. Should it appear that any one person is nominated for the office of director and vice director, his nomination shall be deemed for director only and his nomination for vice director shall be void.

23. A director and a vice director shall be elected in each even-numbered year in each of the following divisions: Central, Hudson, New England, Northwestern, Roanoke, Rocky Mountain, Southwestern and West Gulf. A director and a vice director shall be elected in each odd-numbered year in each of the following divisions: Atlantic, Canadian, Dakota, Delta, Great Lakes, Midwest, Pacific and Southeastern. The term of each director shall be for two years. The terms of all directors and vice directors shall begin at noon on the first day of January of the year after that in which they are elected.

24. In accordance with the provisions of Article 7 of the Articles of Association, members of a territorial division may petition for recall of the director of their division. The recall petition shall be presented to the Secretary not later than June 1st of the second year of the term of office. A valid petition shall contain the signatures of not less than 10 percent of the number of Full members voting in the election at which the director was elected or not less than 10 percent of the Full members resident in the division on the preceding December 31st

if the director was elected without membership balloting. Upon certification by the Executive Committee that the petition is valid, the Secretary shall prepare a ballot asking the single question, "Shall the Director be recalled, yes or no." If a majority of the votes cast are for recall, then the office of director shall be declared vacant. No director shall be subject to more than one recall during a single term of office.

25. The annual meeting of the Board of Directors shall be held in the vicinity of Newington, Connecticut, in March or April of each year. The second meeting of the Board of Directors shall be held in the vicinity of Newington, Connecticut, in September or October of each year. The places of the meetings shall be designated by the President and notified by the Secretary. The times and places of the meetings may be changed provided that specific provision is made therefor by (1) majority vote of the directors at the next preceding annual or second meeting, or (2) majority vote of the directors by mail initiated by the Executive Committee or on petition of at least five directors, such mail vote to be taken at least 60 days previous to the date proposed for the meeting.

26. Special meetings of the Board of Directors may consider or act upon only those matters which are set out in the request provided for in Article 4 of the Articles of Association. The call for any such meeting shall specify the matters to be considered.

27. A majority of the members of the Board of Directors or of any committee shall constitute a quorum at any meeting of the Board or Committee. Articles 8 and 9 nevertheless shall be applicable to the election of officers and amendment of any Article or By-Law.

28. Prior to any regular meeting of the Board of Directors, the Secretary, upon consideration of the reports of the officers and directors, shall establish an agenda for the meeting. Proposals for amendment of the agenda or for the deletion or addition of items shall be the first order of business.

29. On questions of order and procedure not otherwise determined by these By-Laws the provisions of the current edition of *Robert's Rules of Order* shall prevail.

30. In accordance with the provisions of Article 4 of the Articles of Association and for the purpose of By-Laws 14, 17, 18, 19, 20, 22 and 23, the following territorial divisions are established:

ATLANTIC DIVISION, those portions of the states of New York and New Jersey not included in the Hudson Division, the states of Pennsylvania, Maryland and Delaware, and the District of Columbia; CANADIAN DIVISION, alternately known as the Canadian Radio Relay League, the provinces of Nova Scotia, New Brunswick and Prince Edward Island, Ontario, Quebec, Saskatchewan, Manitoba, Alberta, British Columbia and Newfoundland, the Northwest Territories and the

Yukon Territory; CENTRAL DIVISION, the states of Illinois, Indiana and Wisconsin; DAKOTA DIVISION, the states of Minnesota, North Dakota and South Dakota; DELTA DIVISION, the states of Louisiana, Mississippi, Arkansas, and Tennessee; GREAT LAKES DIVISION, the states of Kentucky, Michigan, and Ohio; HUDSON DIVISION, the counties of New York, Bronx, Richmond, Kings, Queens, Nassau, Suffolk, Sullivan, Westchester, Rockland, Putnam, Orange, Ulster, Dutchess, Columbia, Green, Albany, Rensselaer, Schenectady, Saratoga, Warren, and Washington of the state of New York, and the counties of Bergen, Passaic, Morris, Essex, Hunterdon, Somerset, Sussex, Warren, Union, Middlesex, Monmouth, and Hudson of the state of New Jersey; MIDWEST DIVISION, the states of Nebraska, Iowa, Kansas and Missouri; NEW ENGLAND DIVISION, the states of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut; NORTHWESTERN DIVISION, the states of Washington, Oregon, Montana, Idaho and Alaska; PACIFIC DIVISION, that portion of the state of included in the Southwestern Division, the states of Nevada and Hawaii and the United States possessions in the Pacific; ROANOKE DIVISION, the states of Virginia, West Virginia, North Carolina, and South Carolina; ROCKY MOUNTAIN DIVISION, the states of Colorado, Wyoming, Utah and New Mexico; SOUTHEASTERN DIVISION, the states of Georgia, Florida, and Alabama, the United States Possessions in the Caribbean, and the commonwealth of Puerto Rico; SOUTHWESTERN DIVISION, the counties of Imperial, Inyo, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara and Ventura of the state of California, and the state of Arizona; WEST GULF DIVISION, the states of Texas and Oklahoma.

Officers

31. The President shall preside over all meetings of the Board of Directors. He shall, subject to instruction from the Board of Directors, and with the assistance of the General Manager, represent the League in its relationships with the public and the various governments, governmental agencies and officials with which the League may be concerned and shall be the official spokesman of the Board of Directors in regard to all matters of League policy. Any vacancy occurring from time to time by death, resignation or incapacity of any member of the Executive Committee, may be filled by appointment made by the President, for the balance of the original term of such member.

32. In the absence or disability of the President, the First Vice-President shall preside at meetings of the Board of Directors and in general act in his stead. Should the First Vice-President be also absent or unable to act, the Vice Presidents shall succeed in the order of their election.

33. The Secretary shall record the proceedings of all meetings of the Board and of the Executive Commit-

tee. He shall promptly furnish copies of the minutes of these meetings to all officers and members of the Board and publish them in *QST*. He shall be responsible for the maintenance of the corporate status of the League and the filing of all reports and certificates which may be required of the League under the corporation laws of the State of Connecticut. He shall be the archivist of the League and for the performance of his such duties may call upon the General Manager for such clerical and stenographic assistance as he may require. To the extent that may from time to time be required by law, he shall act as agent for the service of process, but only while present in the State of Connecticut and he is not authorized to accept service of process elsewhere.

34. The Treasurer shall be the recipient of all monies of the League and shall deposit the same in the name of the League in a depository specified by the Board of Directors. He shall sign checks drawn by the General Manager in payment of obligations known by him to be proper and authorized. He shall make a report at the annual session of the Board of Directors and shall attend meetings of the Board. He shall furnish bond satisfactory to the Board, the expense of such bond to be borne by the League. He shall be ex-officio a member of the Management and Finance Committee provided for in By-Law 36 and shall, on consultation with and subject to the general supervision of the Management and Finance Committee, invest and reinvest the surplus funds of the League in any bonds or stocks or other securities as would be selected by a trustee with the care of a prudent investor.

35. The Vice President for International Affairs shall monitor the conduct of international liaison by ARRL staff. He shall initiate recommendations for ARRL representation at international meetings. He shall encourage the growth and strengthening of IARU, its member societies and amateur radio worldwide. He shall coordinate and monitor planning and strategy for improving international frequency allocations to the Amateur Radio Service.

Standing Committees

36. The following standing committees are established:

Plans and Programs
Membership Affairs
Management and Finance

37. Each standing committee shall consist of at least four directors and a vice president. No elected member of the Executive Committee shall serve as a member of a standing committee. Appointments shall be made by the President and shall be for a term of one year. The President shall designate the chairman of the committee. Standing committees shall make written annual reports at least thirty days prior to each annual meeting of the Board of Directors. At the beginning of the term of each committee, it shall review any pending items and report to the next meeting of the Board.

38. The Plans and Programs Committee:

Develops and appraises short and long term plans for ARRL.
Reviews, refines and makes recommendations regarding new programs and undertakings.
Makes feasibility studies.
Monitors and appraises role of ARRL vis-a-vis changing technology, social trends and needs.
Appraises, on a continuing basis, changing needs for frequency band allocations and sub-band assignments.
Monitors and encourages public relations and undertakings, recommending to Board for action programs and enterprises designed to enhance the public image of amateur radio.
Monitors expenditures in the areas of the committee's jurisdiction and prepares an annual report and such supplemental reports as may be necessary.

39. The Membership Affairs Committee:
Performs studies and makes recommendations for Board action in areas of membership interest pertaining to:
Affiliated club matters
Field Organization affairs
Membership awards and recognition
Publications, new and existing
Membership services provided by Headquarters
Membership growth
Voting and election matters
Appraisal of membership attitudes, problems, needs and commitment
Prepares an annual report and such supplemental reports as may be necessary.

40. The Management and Finance Committee:
Makes recommendations to the Board regarding changes in management structure and procedures to improve operations.
Performs continuing reviews of all aspects of League management performance and effectiveness, as well as League finances.
Provides advisory services to the Board and the General Manager in areas of staff management structure and remuneration.
Makes recommendations to the Board in connection with audit and tax matters and acts as a Board Audit Committee.
Acts as an advisor to and supervisor of the Treasurer in regard to the investment of the League's funds.
On an annual basis, and with the collaboration of the General Manager, reviews and approves the operating budget for the coming year and forwards to the Board of Directors for ratification.
Formulates budgetary projections for the intermediate and long-term requirements of the League.
Prepares an annual report.

41. All standing committees shall have the power to

originate recommendations to the Board.

Executive Committee

42. Pursuant to Article 6, the Executive Committee is assigned specific responsibility for:

Monitoring progress of Board actions and recommendations in order to see that they are expeditiously accomplished.

Monitoring expenditures for legal assistance. Providing assistance to the staff and general counsel in connection with Board recommendations for petitions to the Federal Communications Commission and other governmental agencies.

Evaluating for the Board proposed rule and regulatory changes.

Official Publication

43. There shall be an official publication maintained

by the League, in the form of a monthly journal, the name of which shall be *QST*. A copy of this journal shall be supplied each month to every member of the League in good standing. The general management of this journal shall be in the hands of the General Manager. The policy of the journal shall be determined by the Board of Directors.

References

44. Without changing their import, the Secretary may from time to time, on notice to the members of the Board of Directors, renumber these By-Laws so as to serve the purpose of ready reference. Any reference in these By-Laws to words "he, his, or him" is understood to mean "he/she, his/her and himself/herself." References in these By-Laws to Articles shall be corrected, when necessary, by the Secretary to conform to renumbered Articles.

RULES AND REGULATIONS CONCERNING AMERICAN RADIO RELAY LEAGUE CONVENTIONS

1. American Radio Relay League Conventions and Hamfests are meetings of persons interested in amateur radio which are authorized and conducted in accordance with the rules to follow. ARRL Conventions may be sanctioned at the section, State or Province and Division levels; normally there will be not more than one Convention at each level in a given area per year.

2. Neither the name of the American Radio Relay League, nor the initial letters thereof, nor its emblem, shall be used in connection with any meeting or convention, or in the advertising thereof, unless it has been approved in the manner set forth below.

3. Parties desiring to conduct an ARRL Convention shall obtain the approval of the director of the division in which the convention is to be held, by an application setting forth the place and date of the proposed convention, the area to be served, the particular purpose to be served thereby, the clubs, associations or groups who propose to sponsor it, and the names and addresses of the officers chosen to conduct it. When the director is satisfied that the approval of such convention will be in the best interests of the League, he shall submit the application to the Executive Committee for its formal approval. Upon such final approval the headquarters shall notify the chairman or secretary of the convention group. The management, program and financial plans of every such convention shall be subject to the approval of the director of the division in which the convention is to be held. Every such convention will make provision for an ARRL forum or meeting and for an ARRL display booth or table. On its part, the League will make every effort to provide a speaker from among the headquarters staff or from among the officers of the League at no cost to the convention treasury; to provide editorial support in *QST*

for the event; to accept paid advertising at rates lower than for commercial purposes, and to contribute publications to be used as awards or prizes.

4. Parties desiring to conduct an ARRL hamfest shall obtain approval of the director of the division in which the hamfest is to be held, by an application setting forth the place and date of the proposed hamfest; the area to be served; the clubs, associations or groups who propose to sponsor it, and the names and addresses of the officers chosen to conduct it. The director will notify the headquarters that the hamfest has been approved. ARRL hamfests will make space available for an ARRL display, and those ARRL hamfests which include formal speaking programs will provide time for an ARRL meeting if so requested by the director or other elected League official. There is no limit to the number of ARRL hamfests which may be held, but care should be taken to avoid conflict with other hamfests serving the same general area. The headquarters will provide editorial support in *QST* for the event, will provide for advertising in *QST* at rates below commercial rates, and will on request provide publications to be used as awards or prizes.

5. Notwithstanding the foregoing provisions, the Board of Directors may, at any meeting, authorize or direct, upon such terms as it may prescribe, the holding, as a National Convention, of a meeting of persons interested in amateur radio from throughout the operating territory of the League. The management, program and financial plans of every such convention, shall be subject to the joint approval of the director concerned and the Executive Committee.

6. The General Manager, with the approval of the Executive Committee, is also authorized to provide

(upon the request of the directors affected), for the holding of a State Convention designed for amateurs

residing in any state which lies partly in each of two divisions.

RULES AND REGULATIONS CONCERNING ADVISORY COMMITTEES

The following rules and regulations provide for the establishment of national advisory committees, composed of qualified amateurs, to undertake studies, review proposals, and to communicate advice, recommendations and expertise in various specialty areas of concern to the League from the League's membership to its management. Each ARRL Division is represented on each advisory committee. The division representatives to the national advisory committee also serve as special advisors to the Division Director.

1. Authority for establishing, terminating, or modifying the terms of reference of any advisory committee rests with the Board of Directors.

2. Any proposal to the Board for the establishment of an advisory committee shall outline the purpose of the committee and the proposed scope of its activities, and shall explain why its objectives cannot be satisfied through existing mechanisms in the ARRL structure.

3. The membership of any advisory committee shall consist of one Full Member of the League from each division who possesses special expertise in the committee's field of endeavor. Committee members are appointed by the respective division directors for terms concurrent with that of the director; thus, League members interested in serving on advisory committees should make themselves known to their director. The advisory committee members serve at the pleasure of the director and shall be responsible to him for the proper performance of their duties.

4. Each year, the President shall designate one member of each advisory committee as chairman for the ensuing year. Chairmen will serve in that post for no more than two one-year terms consecutively. Each chairman shall designate a vice chairman to assist him and to assure continuity in the committee's operations.

5. One director, officer, or vice director of the League

shall be designated by the President as a non-voting member of each advisory committee, to act as liaison between the committee and the Board. One member of the headquarters staff shall be designated by the General Manager to act as liaison between the committee and the Headquarters, and to provide staff assistance as required.

6. Advisory committee studies may be initiated in the following ways:

- a. By request of the Board of Directors;
- b. between meetings of the Board, by request of the Executive Committee or the President;
- c. at the committee's own initiative; or
- d. in matters relating to Headquarters administration, at the request of the General Manager. The directors shall be advised of any assignments made in this way.

Committee recommendations shall be made in a timely manner to the Board or to the staff, as appropriate, and shall be advisory in nature. Unless otherwise specified, and insofar as possible, reports and recommendations shall be submitted for consideration at least 30 days prior to the next regular meeting of the Board.

7. Members wishing to express their opinion on a matter being studied by, or within the terms of reference of, an advisory committee, are encouraged to communicate with their division representative. To this end, the names and addresses of committee members shall appear in QST at least annually. Space in QST and other League publications shall be available to the committees, as appropriate.

8. Members of advisory committees serve on their respective division cabinets. Incidental expenses are reimbursable according to guidelines adopted by the Board. Travel expenses normally are not reimbursable. Additionally, advisory committee members are entitled to the privileges accorded Assistant Directors.

RULES AND REGULATIONS OF THE ARRL FIELD ORGANIZATION

1. The League maintains a Field Organization for the following purposes and objectives: emergency communications, message traffic, volunteer monitoring, RFI problem-solving, support of affiliated clubs, state government liaison, encouragement of technical activities and dissemination of on-the-air bulletins.

2. For the activities of the ARRL Field Organization, the territory of the League is defined as consisting of the territorial Divisions described in By-Law 30. The

ARRL Divisions are further subdivided into ARRL Sections for the administrative purposes of the Field Organization.

3. In each Section there will be an elected Section Manager (SM) who will have authority over the Field Organization in his or her section, and, in cooperation with his Director, will foster and encourage ARRL activities and programs within that section.

4. Any candidate for the office of Section Manager must have been both a Full member of the League for a continuous term of at least two years and a licensed amateur of Technician Class (or Canadian Amateur Certificate) or higher preceding receipt of a petition of nomination.

5. Each Section Manager shall be elected for a two-year term of office in accordance with the following procedure:

a) On any date not later than 5:30 P.M. of the Friday prior to or corresponding to the tenth day of March, June, September and December of each year, nominating petitions signed by five or more Full members of specified sections and naming a Full member of each such section as candidate for Section Manager may be filed with the General Manager in the case of sections consisting of U.S. territory, and with the CRRL Secretary in the case of Canadian sections. The General Manager shall solicit such petitions in two appropriate issues of *QST* to insure completion of the election on or before June 30, September 30, December 31 or March 31 respectively. The solicitation shall show the name, call and term ending date of the incumbent in each section solicited, and give full instructions for filing.

b) If there is only one eligible nominee on the appropriate listed closing date for receipt of petitions, the General Manager (or CRRL Secretary) shall declare him elected without balloting. If there is more than one eligible nominee, then on or before April 1, July 1, October 1 or January 2, respectively, the General Manager (or CRRL Secretary) shall send by mail a ballot to each person who on the date coinciding with the respective closing date from paragraph 5a above of that year was a Full Member of the League in the section in which the election is being held. If that mailing date falls on a Saturday or a Sunday, then ballots shall be sent out no later than the following Monday. The ballot shall be accompanied by information on the Amateur Radio background of each candidate.

c) Ballots to be counted shall reach the General Manager (or CRRL Secretary) not later than 5:30 P.M. of the Friday prior to or corresponding to the 20th of May, August, November or February, respectively, and shall be counted the following Tuesday, under the supervision of the General Manager (or CRRL Secretary). The candidate receiving the greatest number of votes in each case shall be declared elected. The candidates shall be notified by mail and the results of election for Section Manager terms beginning July 1, October 1, January 1 or April 1, respectively, shall appear in the first available issue of *QST*.

d) If there is no eligible nominee, the procedure in 5a, b and c will be repeated in six months and the term of office of any Section Manager elected under this resolicitation procedure will be shortened to 18 months. If there again is no eligible nominee, the person holding office shall continue in office until the next

regular election established by these rules for said section.

e) Vacancies in the office of Section Manager occurring between elections shall be filled by appointment by the General Manager (or CRRL Secretary) in consultation with the Director and upon recommendation of the outgoing SM.

6. The office of any Section Manager may be declared vacant by the Executive Committee whenever it appears to be in the best interests of the membership to do so. On such declaration, the General Manager (or CRRL Secretary) will appoint a new Section Manager as provided in Rule 5e.

7. The Section Manager is the senior elected ARRL official in his section. In discharging his responsibilities, he:

a) Recruits and appoints eight section-level assistants to serve under his general supervision and to administer the following ARRL programs in the section: emergency communications, message traffic, official observers, affiliated clubs, public information, state government liaison, technical activities and on-the-air bulletins.

b) Supervises the activities of these assistants to ensure continuing progress in accordance with overall ARRL policies and objectives.

c) Appoints qualified ARRL members in the section to volunteer positions of responsibility in support of section programs, or authorizes the respective section level assistants to make such appointments.

d) Maintains liaison with the Division Director and makes periodic reports to him regarding the status of Section activities; receives from him information and guidance pertaining to matters of mutual concern and interest; serves on the Division Cabinet and renders advice as requested by the Division Director; keeps informed on matters of policy which affect section-level programs.

e) Conducts correspondence or other communications, including personal visits to clubs, hamfests, and conventions, with ARRL members and affiliated clubs in the section; either responds to their questions or concerns or refers them to the appropriate person or office in the League organization; maintains liaison with, and provides support to, representative repeater-frequency coordinating bodies having jurisdiction in the section.

f) Writes, or supervises preparation of, a monthly "Section News" column in *QST* to encourage member participation in the ARRL programs in the section.

8. Forming a major part of the ARRL Field Organization are the Amateur Radio Emergency Service (ARES)

and the National Traffic System (NTS) for emergency and traffic operations. Details concerning ARES and NTS (as well as the Radio Amateur Civil Emergency Service — RACES — which is administered by the U.S. Government's Federal Emergency Management Agency) are contained in the ARRL Public Service Communications Manual.

9. Field Organization leadership appointments from the Section Manager shall be available to qualified ARRL Full members in each section. These appointments are as follows: Section Emergency Coordinator, Section Traffic Manager, Official Observer and RFI Coordinator, State Government Liaison, Technical Coordinator, Affiliated Club Coordinator, Public Information Officer, Bulletin Manager, District Emergency Coordinator, Emergency Coordinator and Net Manager. These appointees shall assist the Section Manager in specialized functions. Other leadership appointments may be established by the General Manager with the approval of the Executive Committee. Complete details of the qualifications, duties and functions

of these appointees shall be contained in ARRL publications such as Operating An Amateur Radio Station.

10. Field Organization station and individual appointments from the Section Manager shall be available to qualified ARRL Full Members in each section. These appointments are as follows: Official Relay Station, Official Bulletin Station, Official Emergency Station, Official Observer and Public Information Assistant. Complete details of the qualifications for these appointments shall be contained in ARRL publications such as Operating An Amateur Radio Station.

11. These rules and regulations shall have the force and effect of the By-Laws of the League, including details contained in referenced publications. They may be amended as necessary from time to time by the General Manager upon approval of the Executive Committee. The General Manager shall cause more detailed provisions to be published as needed in current editions of League publications.

RULES AND REGULATIONS CONCERNING AFFILIATED SOCIETIES

1. It shall be the policy of the League to affiliate with itself organized, non-commercial amateur radio groups or societies of kindred aims and purposes with a view to forming a homogeneous organization for unity of action in matters affecting amateur welfare. This policy shall embrace three categories of affiliation as follows:

Category 1 — Local amateur radio clubs.

Category 2 — Regional or National organized amateur radio groups.

Category 3 — Local school or youth group amateur radio clubs, or amateur radio clubs in homes for the elderly or disabled.

4. In a Category 1 or 2 society, at least 51% of the voting membership must be full or associate members of the League, and at least 51% of the voting membership must be licensed amateurs to be eligible for and to maintain affiliation status. In a Category 3 society, affiliation status may be granted if the sponsor, faculty advisor, president or trustee of the society is a licensed amateur and a League member, and where the society's name clearly shows that it falls within this grouping.

5. The General Manager shall be responsible for the general supervision of the affiliated societies and their welfare, and for the relations existing with them; he shall keep the records and conduct the correspondence with them.

6. These Rules and Regulations shall have the force and effect of By-Laws of the League. They may be amended as necessary from time to time by the Executive Committee. Amendments or revisions shall become effective as of the date of their publication in QST.

7. In addition to meeting the normal requirements for affiliation, as outlined in the Rules and Regulations Concerning Affiliated Societies, an amateur radio club outside the League operating territory must submit a statement from the IARU member society of the country in which it is located approving ARRL affiliation of the club. Upon receipt of this letter and the usual forms, the club's application will be submitted to the Executive Committee for approval.

2. Any such society which suitably expresses its sympathy with and allegiance to the aims and policies of the League in accordance with these Rules and Regulations is eligible for affiliation. Applications for affiliation shall be submitted to the General Manager and referred to the respective Division Director who, in discretionary consultation with the respective Section Manager, shall determine that the society is worthy and well qualified. The application thereupon shall be referred to the Executive Committee for its approval. A suitable certificate shall be issued to the society in recognition of its affiliation.

3. The affiliation of any society may be terminated and its charter recalled by the Executive Committee at any time for any cause deemed prejudicial to the best interests of the League.

TERMS AND CONDITIONS GOVERNING THE AVAILABILITY OF MAILING LISTS FROM HEADQUARTERS

Category 1 labels — Lists furnished *without charge* to further the organizational purposes of the League.

“Admin” labels are furnished to incumbent division directors and section managers for use in routine and administrative mailings to members in their respective geographical territories.

“Convention” and “Hamfest” labels are furnished, upon request, to sponsors of ARRL sponsored and approved events for use in making mailings promoting the event. They may not be used for any other purpose, specifically for campaign mailings during an ARRL election.

Category 2 labels — Lists furnished at *cost of production*.

“Campaign” labels are furnished, upon request, to any election candidate whose eligibility has been properly certified for the purpose of campaigning for office in the League.

“Non-commercial” labels are furnished to any Full member of the League for any non-commercial purpose which is designed to further amateur radio and the purposes of the League. Such lists may be furnished up to a division in size.

Category 3 labels — Lists furnished at *commercial mailing list rates*.

“Commercial” labels are furnished for any legitimate business purpose. Such lists are made available under a cost schedule prepared from time to time by the General Manager of the League.

Any member of the League may, upon request, have his name deleted from any category 3 commercial lists which are furnished by League Headquarters. Such a request may be made upon renewal by an annual member or any time by a Life Member of the League. [Note: Category 3 labels will not be available until members have been invited to delete their names.]

All requests shall be made in writing on a form to be provided by the Hq. (No telephone requests will be honored.) The form will require that the purpose for requesting the list be stated and will require a signed statement that the list be stated and will require a signed statement that the list is being used only for the purpose requested.

Two copies of material mailed using addresss labels provided by Hq. shall be sent to Hq., and one copy shall be sent to each director concerned, via first class mail, at the time of the first mailing.





THE AMERICAN RADIO RELAY LEAGUE
NEWINGTON, CT 06111

THE AMERICAN RADIO RELAY LEAGUE, INC.

ADMINISTRATIVE HEADQUARTERS NEWINGTON, CONNECTICUT, U.S.A. 06111

BENEFITS AVAILABLE THROUGH ARRL CLUB AFFILIATION

1. Affiliated clubs can receive lists of ARRL full members in the club's geographic area once each year for membership solicitation purposes.
2. Special bulletins from ARRL to affiliated clubs containing everything we can find that is of interest to the typical ham group are mailed at frequent intervals. (Examples: Ideas for contests, programs and other club activities; new audio visual programs available through your headquarters, discussion of Field Day, class ideas, what other clubs are doing.)
3. Your affiliated organization retains \$2.00 of each membership entry sent to ARRL by an officer; it helps the treasury.
4. Occasionally publicity drafts are mailed out to affiliated clubs only. Examples are PR releases on National Radio Week/Field Day. A complete publicity kit is available so affiliated clubs may tailor their own drafts, the best kind as far as local papers are concerned.
5. Affiliated groups are the first called upon to sponsor Official League conventions.
6. Affiliation requires the approval of your elected Division Director, who can usually be prevailed upon to visit at meetings. Affiliated clubs also get first chance on visits from headquarters staffers or Section-level officials who happen to be traveling in the area.
7. National distinction and recognition is afforded by permission to display the ARRL emblem on organizational posters, stationery, etc.
8. Most audio visual program material is available first to affiliates. Visual aids include films, slide shows and video tape productions. Audio tape programs are also available. Most programs require booking at least a month in advance.
9. Only affiliated clubs are eligible for participation in the gavel competitions in the ARRL DX Contest, the ARRL November Sweepstakes and the ARRL V.H.F. Sweepstakes.
10. Affiliated clubs can donate the complete set of ARRL publications to a local library at a discount price.

11. All Category 1 (local area) Amateur Radio Clubs are eligible to participate in the Special Service Club Program.
12. List of our affiliated clubs in your section are available to help you share ideas and coordinate activities.
13. Club liability and equipment insurance.
14. Club stationery saying "ARRL Affiliated Club."
15. Use of ARRL logo on newsletters and letterhead.
16. Affiliated clubs can donate a QST subscription to their local library at the discount price of \$23. (\$28 in Canada)

Simply return an annual report form to ARRL and keep up the 51% ARRL member requirement to enjoy all these benefits. Write the Club and Training Department of the ARRL for further details on any of these benefits.

CT-7 (383)

New Tricks for Old Club Program Nights

Same old programs year after year? Think your club has done it all? Insights are offered herewith to prove you wrong.

A little bit of brain storming mixed with many ideas found in club bulletins received has produced a bag of new tricks for "program nights." Activities and materials for twenty-five areas have been considered. A few of these areas will be reported on from time to time. This issue will cover "Old Timers' Night," "Homebrew Night" and "Novice Night."

"Old Timers' Night" is an annual event for many clubs and is a favorite of their members. All known old timers (including non-members) in the area are sent special invitations. *200 Meters and Down, 50 Years of ARRL* or other handbooks on antique gear could be used as door prizes. Ideas members can work on for this program are:

- 1) Meet at a state or radio museum displaying old equipment.
- 2) Have members bring antique equipment and give an explanation of it. (The Des Moines Radio Amateur Asso-

ciation, IA, lined up a 5-meter receiver used in the mid-thirties for their display.)

3) Read items from an old club bulletin or old files and pass around an old club scrapbook.

4) Display old tubes and hold a contest with a prize for the person who can name the most.

5) Have an old timer speak on spark gap and other early devices or what amateur radio was like when he first started operating.

6) Pass around an early *QST* or other publication.

7) Award certificates to any of the following — oldest member in age, longest licensed, earliest club member, earliest president, member with the oldest confirmed QSO/WAC/WAS/DXCC.

Suitable "blank" certificates are available from Hq. to award as prizes.

"Homebrew Night" usually includes a contest with various categories of competition. Some descriptive words that can be combined to make a half-dozen categories include: Novelty, ingenuity, originality, usefulness, economy, use of surplus parts, use of readily available parts, operating convenience, neatness, workmanship, sophistication of function, and simplest. Clubs often pit holders of the same class of license against each other. Penn Wireless Association (PA) even awards the best mistake, best unfinished project and best "pipedream." Circuit diagrams and documentation or proof of operation may be required. Utah Amateur Radio Club allows their members to enter antennas and towers, that is, pictures and diagrams of them. Award certifi-

cates which can be filled out appropriately are obtainable from Hq.

A tour can be planned to those area stores carrying surplus parts. Possible club construction projects might be displayed and voted on as to which one to take up for the year. An area expert on homebrewing could give a talk. Bibliographies listing surplus stores or past *QST* articles on equipment built from surplus parts can be requested from Hq.

"Novice Night" is often held by clubs that have a licensing class comprised of many non-club members in order to stir these peoples' interest in joining the club. Other guests could include Novice friends of old timers and non-ham friends of Novices. Door prizes (such as a year's membership dues for the club) are given to the oldest and youngest Novices. Construction projects that the Novices have built can be displayed. A Novice corner can be set up for the exchange of crystals, making skeds, and so on. An award can be given to the best student in the class. Or for a different twist, have the Novices plan the program to present their fields of interest, such as Novice nets, DX in the Novice bands, the Novice Roundup or Worked-All-States.

Materials that can be used for the meeting, all obtainable from Hq., are: Novice Roundup sample logs, the Technical Department bibliography on the "Novice Gallon," Quiz 10 covering Novice license questions and the following booklet and pamphlets of use to Novices — *Operating an Amateur Radio Station*, "Your Novice Accent," and TAS-1 "Curing Signal and Operating Difficulties." — WA1STO

Early devices can be displayed at Old Timers' Night.



Ideas For The Club Program Chairman

To many local ham clubs, the meaning of the word "program" is synonymous with the word "speaker." You may have heard a disappointing announcement like this at your club meeting: "Sorry, no program tonight; we couldn't find a speaker." While it would be nice to be able to arrange for interesting visitors to entertain your club at every meeting, it is a little too much to expect time after time.

Interesting programs at every meeting are possible, however. There are many programs that can be conducted by just using the talent in the membership with an occasional visiting speaker to augment your programs. When a club has found out how to do this well, it is rare that an outside speaker can hold the interest that a member-participating program can.

There are several little techniques that a program chairman can use to advantage to bring about a self-sustaining situation like this. As a starter, try to establish an atmosphere in the program of light-hearted fun, always include a serious interlude, and above all, have a purpose for the program. For this last requirement, the program should have a theme — a reason — for happening. Each member in the audience attends a meeting for one reason or the other. Provide a good reason so that he can join in the spirit of the program right away. For example, consider if your attitude would be the same as you enter the hall for a meeting that had been announced like this:

Regular Club Meeting
Monday 8 P.M.

or like this:

PUBLIC SERVICE NIGHT! Monday 8 P.M.

Program: "All About The NTS". W3MPX
"Public Service In The
AREC" W3ICC
"RACES Needs"
County CD Director
Quiz Game! Prizes!
ARRL slide/tape-
Phone Section Net
Come and find out how you can
meet your responsibility to ham
radio!

Business: Field Day Plans K3AHH
Social: Ragchews, raffle, refreshments
See The Astro Ten created by
W3YZC

Good program themes are not as difficult to come by as you might think at first. They should reflect the character of your club. Examine the committees and other areas of interest in your club for ideas — you might choose to have a V.H.F. NIGHT, OPERATING NIGHT, RTTY NIGHT, DX NIGHT, or all of these, depending upon your club. Look for theme ideas from other areas that your club does not now cover. It just might stimulate a whole new field of interest.

The night before a club meeting is not the ideal time to try to arrange a program. If you can consistently come up with a good one on such short notice, you are a miracle-man. Here is

New Vigor For Your Ham Club

BY JOHN B. JOHNSTON,* K3BNS

where programs that fail really go astray. Your best bet is to plan ahead by selecting a theme for each meeting for the entire calendar year. Then sketch out a program with several items that fit into each theme: speaker topics, films, contests, etc. Now you can look over the entire year to double-check that everything is being covered with the proper emphasis and attention. Now you can go to work lining up the program material.

Think of each program as a little production. Try to get good balance: fun, service, knowledge, skill. Who are the experts in your club for the selected themes? You'll be pleasantly surprised to find how cooperative they will be to appear on *that* program. What films or training aids are suitable? They can be used to supplement the program very effectively. Check the ARRL and local industry film library lists. How about a short quiz game? Often this little device can balance out the program and add audience participation at the same time. If the technical content of the program is sparse, use ten questions requiring one word answers with material right from the Handbook. If the program was pretty serious fare, make the questions light for a change of pace. For instance, base the quiz on novice exam questions (no one will get them all!).

There are many variations on the quiz game you might want to try from time to time. Have them try to remember the names of ham equipment manufacturers from their slogans, or try to guess the names of certain members from one word hints. Another variation is to cut out pictures of ham equipment from old and new catalogs, blot out any identifying names and tape them around the room. Ask them to list the manufacturer and model number. Then there is the "Question Man" variation. You supply a set of answers beforehand in the club bulletin or at the previous meeting, and offer prizes for the best questions. Example: answer — "semiconductor," question — "What do you call a part-time trainman?" The prizes need only be small token ones, say a free ticket for the raffle.

Publicize all of the themes that are being planned to let it be known what you need. When someone mentions that he is interested in a certain topic, line him up for a specific program right on the spot. It is much easier to find something when you know what you're looking for. Use your club bulletin to get your program themes across.

In addition to announcing the next program, work with the bulletin editor to have other articles included that are related to the theme. If your president writes a message, ask him to cover the topic, too. Have the chairman of the committee closest to the subject matter turn out an article. By scheduling the program themes well in advance, there is no time pressure upon anyone.

Most likely your club has some form of meeting format consisting of the program, a business session and a social mixer. Make sure that you have a good understanding with the president as to the timing for each; otherwise a good program might have to be foreshortened because of an overly-long business harangue. An Executive Committee, or some such group, should be assigned routine business functions to keep meet-



SORRY, NO PROGRAM TONIGHT; WE COULDN'T FIND A SPEAKER

ings from bogging down in such detail. Make sure that the program doesn't run over into the social time, or the audience may become restless and noisy. Also, a guest speaker should not be made to wait around a long time while the club does business.

Auction: Ask everyone to bring choice items from his junk box and have a member act as auctioneer. This one is guaranteed to aid an ailing treasury. The custom is usually to pay a commission of 10 percent or so to the club treasury on all items sold.

Town Hall Tonight: Prepare a few slips of paper with controversial topics (a.m. should/should not be outlawed; c.w. is/is not an outmoded communication mode). Select a member to present a five minute impromptu talk on his view for one subject. Then call for a five minute rebuttal from the audience. Next allow 2 minute talks alternating pro and con from other members. Hold a strict time limit to add to the fun.

Public Service Night: Invite organizations such as the Red Cross, Emergency Squads, CD Officials, and the local police, who may have a need for emergency communications (some may not even know it) to send a representative out to the meeting to talk it over with the club. Have member speakers cover the ARPSC and the emergency capability in ham radio. Ask them to discuss their needs. Show one of the League films on emergency communications.

ARRL Night: Obtain several speakers from the field organization members in your club. Maybe your SCM, Director or Vice-Director can make the meeting, too. Ask them well in advance. Show the league headquarters slides.

Station Night: Have everyone bring in a few slides of his station and antennas. Ask each member to describe his station while the slides are projected. This gives him a chance to show innovations that he has come up with and a chance to ask for new ideas.

Construction Night: Announce a construction contest. Offer prizes or certificates for several categories of home-built equipment (original, Handbook, kit, etc.) for each class of license. Show the League film on amateur construction methods.

As the membership catches on to the idea and learns that the way to insure coverage of their special area of interest is to pitch in — they will. Then you have a useful, interesting club. At the end of the first year, announce that the program calendar for the next year is being planned. Survey the membership as to which programs they liked best and request new ideas for the future. You'll get more than enough. You will also have developed an appreciation for the great talent resource in your membership.

OCT

665 Avenida Loma Portal
Newbury Park, CA 91320
9 July 1984

Cal State Poly Tech College ARC, W6BHZ
EE Building, Room 122A
San Luis Obispo, CA 93401

Gentlemen,

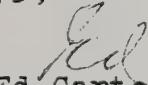
I am writing to you as a member of the American Radio Relay League field organization. I am the Affiliated Club Coordinator for the Santa Barbara Section which covers the Counties of Ventura, Santa Barbara and San Luis Obispo. For about 15 months I have communicated with the 12 Clubs in the Section that are affiliated with ARRL. During that time it has also been my pleasure to attend some of their meetings. While my major responsibility is to work with the Affiliated Clubs, a peripheral assignment is to invite and encourage Radio Clubs in the Santa Barbara Section to affiliate themselves with ARRL.

There are many benefits to being affiliated and the process is almost effortless. As an actively Affiliated Club you will receive RADIO CLUB NEWS and if you regularly sponsor training classes for Novice students and for up-grading already licensed Amateurs, you will receive THE INSTRUCTOR'S NEWSLETTER. Also, as an Affiliated Club, your Members can join ARRL by paying dues to the Club Treasurer and a portion of the dues is retained by the Club. The Special Service Club program provides additional benefits and these are only available to an actively Affiliated Club that is designated a Special Service Club.

The principal requirement to affiliation is having, and maintaining a Club membership of at least 51% of the members also being members of ARRL. Annually a simple report confirming the membership status and listing names of Club officers must be filed. When the initial request for affiliation is presented, a copy for the Club Constitution and By-laws is required. Once you are affiliated it is expected that you will display an on-going commitment to work for the betterment and growth of Amateur Radio, to serve your community when necessary, to encourage your members to join ARRL and to promote ARRL in your community.

I invite you to become an actively Affiliated Club. If you want more information and sample Newsletters to use at your Board meeting, use the enclosed SASE and I will send you a kit for review. I look forward to hearing from you.

73,



Ed Cartotto, W6ZZN
Affiliated Club Coordinator
Santa Barbara Section

cc: Ernie Kappahn, WB6HJW, SM
Sally O'Dell KB1O, ARRL HQ

Date 20 JULY 84

We are interested in affiliation with ARRL. Please send the information kit to

Name of Club CALIFORNIA POLYTECHNIC STATE UNIVERSITY (CAL POLY) ARC
EAT POLY

Attention of CHARLES LINSLEY, N6GAL

Address UNIVERSITY UNION BOX 53

City SAN LUIS OBISPO ZIP 93407

Our Organization has ~20 members (DURING NORMAL SCHOOL YEAR)

We hold meetings monthly , bi-monthly X, other

Meetings are announced by Newsletter postal card

The Club's major objective is to provide members with

Access to one or more repeaters

Technical advancement and training

Opportunity to handle traffic

Social functions (Swap meets, picnics and camp-outs, etc.)

Training in emergency communications

Club sponsored contests

Other SCHOOL CLUB (ALL OF THE ABOVE)

WE WERE AFFILIATED IN THE PAST, BUT ALLOWED OUR AFFILIATION TO LAPSE.

Charles P. Linsley SEC/TREAS.
Signature and title of requester

665 Avenida Loma Portal
Newbury Park, CA 91320
23 July 1984

California Poltechnic State University
Charles E. Linsley, N6GAL
University Union, Box 53
San Luis Obispo, CA 93407

Dear Charles,

Thank you for your fast response to my invitation that you affiliate your Club with ARRL. I am enclosing the Information Kit prepared by Headquarters. In it you will find an assortment of information about ARRL, the benefits of being an actively affiliated Club, and the forms required for your application. Note particularly the copy of Radio Club News and of the Instructor's Newsletter. These bulletins are available to an actively affiliated Club and will be helpful in providing tips of various functions that can be used in Club meetings and in training classes.

More than ever before, the Radio Amateurs must band together to support a strong organization that has the capacity for representing us at conferences where the future of Amateur Radio is being decided. The energy and expertise that the League can bring to bear on problems affecting us can continue only if all of us support ARRL.

If you need more information, call me at 805-498-9970, or write to me at the above address. To save time, when you submit your application for affiliation, mail it directly to

Sally O'Dell, KB1O
Club Program Manager
American Radio Relay League
Newington, CT 06111

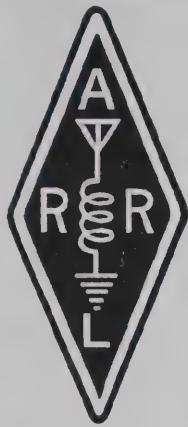
I look forward to your joining the other actively affiliated Clubs of the Santa Barbara Section.

73,



Ed Cartotto, W6ZZN
Affiliated Club Coordinator
Santa Barbara Section

cc: Sally O'Dell, KB1O, ARRL HQ
Ernie Kappahn, WA6HJW, SM



The COMMUNICATOR

July, 1994

Southwestern Division - American Radio Relay League
Fried Heyn, WA6WZO
Director

Art Goddard, W6XD
Vice Director

DEAR LEAGUE MEMBER...

This is an annual newsletter for all ARRL members in the Southwestern Division (Southern California and Arizona). We want to help keep you informed on matters affecting Amateur Radio, particularly those subjects of greatest interest and importance to our division.

COMING EVENTS

Here are some of the highlights of the Southwestern Division Amateur Radio calendar for the coming months:

Monthly: El Cajon ARC Swapmeet is held the first Saturday of each month at the Santee Drive-In Theater on Woodside Avenue at Highway 67 in Santee, CA, starting at 6am, talk-in 146.52, buyers 50 cents.

Monthly: Palomar ARC Swapmeet is held the second Saturday of each month at the Oceanside Drive-In Theater on Road 76 (3480 E. Mission Avenue) between I-5 and El Camino Real in Oceanside, CA, starting at 6am, talk-in 146.730(-.6), buyers 50 cents.

Monthly: Inland Empire ARC Swapmeet is held the second Saturday of each month at the A.B. Miller High School, north of the intersection of Walnut and Oleander in Fontana, CA, 7am-11:30am, talk-in 145.480(-.6) PL=77.0, buyers free.

Monthly: TRW ARC Swapmeet is held the last Saturday of each month on the northwest corner of Marine Avenue (Compton Boulevard) and Aviation Boulevard in Manhattan Beach, CA, 7am-11:30am, talk-in 145.32(-.6) PL=114.8, buyers free.

July 22-24: ARCA Ft. Tuthill ARRL Hamfest will be held at the Coconino County Fairgrounds, 3 miles south of Flagstaff, talk-in 147.08(+.6) or 442.125(+5)PL=100Hz. This is Arizona's major event of the year with free admission to all activities. Contact Cliff Hauser, KD6XH (602)744-9095.

August 14: Santa Barbara ARC ARRL Hamfest will be held at the Elks Lodge, 150 N. Kellogg, Goleta, CA. It starts at 9am with special activities at 11am and the BBQ at 1:30pm, talk-in 146.79(-.6). Walk-in VE testing begins at 10am. Contact Ron Fugate, N6ANF (805)964-8743.

August 26-28: ARRL SOUTHWESTERN DIVISION CONVENTION will be held at the Town & Country Hotel and Convention Center in San Diego. For more information see the enclosed flyer. Don't miss this one—it's the best in the west!

September 17: 6th ARRL Amateur Radio Awareness Day. Hams are urged to make a special effort to make the general public and schools more aware of the Amateur Radio Service. Public exhibits are encouraged. Call the Field Services Department at League HQ for help with ideas and promotional materials.

September 17: Second Annual ARRL Family Amateur Radio Event (FARE) will be held at Rawhide, 23000 N. Scottsdale Road, Scottsdale, AZ. This major event is in association with Awareness Day. The swapmeet starts at 6am with the exhibit hall opening at 9am, talk-in 146.76(-.6). Contact Len Winkler, KB7LPW (602)861-0303.

October 2: Third Annual San Diego Round-Up will be held at Convair Missile Park (Clairmont Mesa Boulevard and Missile Road), 10am-2pm. Contact Sybil Allbright, W6GIC (619)278-4284.

October 8-9: ARCA Northwest AZ Tri-Club 2nd Annual ARRL Fallfest will be held at the Chamber of Commerce on Highway 95, Bullhead City, AZ (across the river from Laughlin, NV). The swapmeet starts at 6am, talk-in 145.17(+.6). Contact Jerry France, KD0KZ (602) 855-1418.

October 15-16: ARRL Simulated Emergency Test (SET). Contact your SM or SEC to learn how to participate in this ARES/NTS activity.

October 16: ARCA Tucson ARRL Swapfest will be hosted by the Old Pueblo Radio Club at the De Anza Drive-in Theater on 22nd and Alvernon, Talk-in 146.82(-.6). Contact Scott Ketcher, KF7XD (602)295-4631.

October 21-23: ARRL Pacific Division Convention (PACIFICON '94) will be held at the Hilton Hotel in Concord, CA. For more information write WA6CIE or call the MDARC/Pacificon Hotline at (510)676-9048.

October 30: ARRL National Exam Day. Special emphasis is given to public awareness of licensing opportunities. See the last February QST, page 103.

December 3: Superstition ARC ARRL Hamfest will be held at the Mesa Community College in Mesa, AZ, on the S.E. Corner of Dobson Road and Southern Avenue. Contact Tom Stafford, KB7QVV (602) 671-0635.

1995 SOUTHWESTERN DIVISION CONVENTION

September 1,2,3, (Labor Day Weekend)

QUEEN MARY, Long Beach, CA

Chairman Nate Brightman, K6OSC (310) 427-5123

DIVISION VOLUNTEERS

FIELD ORGANIZATION VOLUNTEERS—The key person to contact for information about ham radio activities in your area is your ARRL Section Manager (SM). Each SM is an elected official who serves a two-year term, and who appoints a variety of other people to assist in important Amateur Radio related activities. The Southwestern Division's section managers are:

- Arizona—Clifford E. Hauser, KD6XH
- Los Angeles (Los Angeles County)—Phineas J. Icenbice, W6BF
- Orange (Inyo, Orange, Riverside and San Bernardino counties)—Joe H. Brown, W6UBQ
- San Diego (Imperial and San Diego counties)—Patrick C. Bunsold, WA6MHZ
- Santa Barbara (San Luis Obispo, Santa Barbara and Ventura counties)—Jennifer J. Roe, AA6MX.

There are eight section-level appointments made by the Section Manager:

- Affiliated Club Coordinator (ACC)
- Bulletin Manager (BM)
- Official Observer Coordinator (OOC)
- Public Information Coordinator (PIC)
- Technical Coordinator (TC)
- Section Emergency Coordinator (SEC)
- Section Traffic Manager (STM)
- State Government Liaison (SGL)

These eight section leaders in turn recommend additional appointments. The STM appoints Net Managers (NM) and Official Relay Stations (ORS) in order to maintain the National Traffic System (NTS) at the local level. The PIC appoints Public Information Officers (PIO), usually attached to a local club for generating local PR. The BM appoints Official Bulletin Stations (OBS) for transmitting official ARRL and local bulletins of interest. The TC appoints Technical Specialists (TS) who may assist with local RFI problems and give general technical assistance (supporting the ARRL Technical Information Service), and be part of the "Elmer" effort to help new hams. The SEC appoints District Emergency Coordinators (DEC), Emergency Coordinators (EC), and Official Emergency Stations (OES), to administer the Amateur Radio Emergency Service (ARES). The OOC appoints Official Observers (OO), making them full-fledged members of the Amateur Auxiliary to the Federal Communications Commission (FCC). The State Government Liaisons (SGL), appoints Local Government Liaisons (LGL). Also, Assistant Section Managers (ASM) can be appointed by the SM for special assignments.

There are many opportunities for you to serve in the Field Organization. Contact your SM; his address and phone number are on page 8 of QST. Each SM is given space every month in QST for section news.

ADVISORY COMMITTEES—There are four national ARRL Advisory Committees where representatives are appointed by the division director with the chairman appointed by the President. Each committee has one representative from the division except for the new Spectrum Committee (which replaced the VHF Repeater Advisory Committee and the VHF/UHF Advisory Committee). Contest Advisory Committee (CAC): Mark Beckwith, WA6OTU (also Chairman); DX Advisory Committee (DXAC): Bill Mauzey, W6RT; Public Service Advisory Committee: Ron Boan, AK6Y; Spectrum Committee(SC): Karl Pagel, N6BVU (SC SW spokesman), David Gutierrez, WA6PMX, and James Fortney, K6IYK.

ASSISTANT DIRECTORS (AD)—They are appointed by the division director. In the Southwestern Division assistant directors are ARRL liaisons with local organizations and their appointment is mainly based on the request and recommendation of the groups they represent. The current SW ADs are: NK6A, W6AQ, K6CEO, KK6CG, KB6CMO, W7DRR, KA3DSE, N6EDX, N6ELP, W9FQN, N6FRW, WD6FWZ, KB6FXS, K6GGS,

W6GIC, N6GIW, NV6H, W6HUG, WA6HXM, KB6IYK, W7JU, K6KCI, WA6KKR, K7KYW, KD0KZ, KB6LAK, W6LPJ, WA6MVW, WA6MZV, KC6OJW, KB5OO, WA6OWM, WV7P, N6PC, KD6PCC, K6PHE, K6PQZ, K6QM, K6QS, K7QWR, K7RDG, W6RE, WA6RUZ, W6SWE, W6TKV, N6TME, KC7V, K6VE, WA6VNN, KC6WJM, WB6WWs, AF0X, WD6X, W7YU and W6ZH.

VOLUNTEER COUNSEL PROGRAM—Under this program, lawyers who are also licensed amateurs have agreed to assist other amateurs with ham radio-related legal problems, such as RFI and antenna restrictions. These lawyers will provide a free initial consultation to amateurs regarding ham radio legal problems. To date, the Southwestern Division attorneys that have agreed to serve are: KO6E, KG6FA, KB7FF, KB6FO, KC6I, WA3JPG, N6KQM, N6KUB, KY7M, N6MI, WA6MON, KV7O, WB6OLJ, WW6P, WA6PIR, WB7RJV, WA9STI, N6TFI, and WA6UUY.

VOLUNTEER CONSULTING ENGINEERS—VCEs are registered Engineers. Like the ARRL Volunteer Counsels they will provide a free initial consultation. However, they have special technical expertise in critical areas. For example, a VCE might act as an expert witness by providing technical data to municipal government representatives in support of a proposed Amateur Radio antenna and support structure. The VCEs in our division are W6EEN, AA7GP, WA6LQB, and WV6Y.

TECHNICAL AND EDUCATIONAL ADVISORS—TAs and EAs are ARRL national-level appointees who provide HQ with a volunteer resource. The current Southwestern Division TAs are: K7ES, K6GKU, K6JEY, W6ONT, W6ORG, KOOV, W7PMD, K7QWR, WC2S and K6UI. The EAs in our division are AA6BD and N6CIO.

AMATEUR RADIO COUNCILS—Local clubs form councils in order to better coordinate and promote activities important to the ham community. There are councils in all five of the sections within the division. They are: Amateur Radio Council of Arizona (ARCA)—chairman WB7RFY; Orange County Council of Amateur Radio Organizations (OCCARO)—chairman AB6KE; Los Angeles Area Council of Amateur Radio Clubs (LAACARC)—chairman AA6BC; San Diego County Amateur Radio Council (SANDARC)—chairman KC6QIF, and Tri-County Amateur Radio Council (TriCARS)—chairman AA6MX.

ARRL SW SPECIAL SERVICE CLUBS (SSC)—These clubs have gone through a screening process above and beyond other ARRL-affiliated clubs. They are expected to provide local public relations, emergency communications, training, technical advancement and other activities that further the goals of the Amateur Radio Service. Many SSCs have Award Managers who can check cards for some of the ARRL operating awards. The following are our Special Service Clubs (award managers are listed in parentheses): ARA of Long Beach (N6MRU), ARC of El Cajon (KA6RLX), AZ Repeater Association, Big Bear ARC, Carl Hayden High School, Citrus Belt ARC, Clairemont Repeater Association, Coconino County ARC (N7LQS), Conejo Valley ARC (K1FJM), Corona Norco ARC (W6TKV), Downey ARC (N6ATU), Green Valley ARC, Inland Empire ARC (WA6ZEF), London Bridge RA, Palomar ARC (WZ3P and N6ELP), Placentia Radio Watch, Relay Repeater Club, Riverside County ARA (K6JAD), San Fernando Valley ARC (KI6BU and N6PTI), Santa Barbara ARC (KB6ILV), Scottsdale ARC (W7ZMD), South Bay ARC (KA6ZTO), West Coast ARC (WB6ULU), Western ARA, West Valley ARC (W7LQM).

OTHER VOLUNTEERS—There are many of you who give in other ways toward the betterment of the Amateur Radio with or without an official ARRL title. There are a number of position-holders whose names are kept confidential such as members of an official FCC Amateur Auxiliary Local Interference Committee (LIC). Included are the QSL sorters who normally want to stay anonymous despite donating many unselfish hours; the Sixth

IN CLOSING...

Amateur Radio must change with the times, "High Tech—High Touch." It is important that we begin developing a strategic plan to guide the ARRL in preparing for the opportunities and challenges of the future. With this in mind the Board members and officers are having meetings separate from the regular business of Board meetings. A draft plan will be completed by the end of the year. Your director would appreciate hearing your thoughts on this most important effort; we must as much as possible, make our own future.

Currently the League has increased its service to its members, the general ham population, and society. Not only is the ARRL a membership organization but also now much more of a volunteer organization. Many League programs depend on the individual ham and a local group for their success with HQ and/or local leaders giving the necessary guidance and support.

There are two new characteristics of Amateur Radio that are positive but require special attention. First, since it has become easier to get into ham radio, we have had an extra large increase in the number of fellow hams. With the increased numbers we must better involve them in the mainstream and fellowship of ham radio. Second, as Amateur Radio has found many more ways and places of value, it has become more specialized and

diversified. A natural result is fragmentation; we must meet this challenge with increased efforts to find common goals to better unify us for the future.

Most of us are hams because it is great fun. The one most important common need is spectrum. Amateur Radio is a wonderful hobby but it is because we are a service we have the spectrum in the first place. Remember your ham contribution to the betterment of mankind is important!

See you at the Convention in San Diego. Please make sure you visit us at the ARRL booth as well as the ARRL forum; we would like you to share your thoughts with us.



Fried Heyn, WA6WZO

(714) 549-5816

MCI Mail: 254-2030

Packet: WA6WZO @ WF6O

Art Goddard, W6XD

(714) 556-4396

MCI Mail: 570-0404

Packet: W6XD @ WF6O

AMATEUR RADIO EMERGENCY SERVICE REGISTRATION FORM																																																																														
NAME: _____																																																																														
Call: _____																																																																														
Address: _____																																																																														
City: _____	State/Prov.: _____ Zip/PC: _____																																																																													
Bus. phone: _____	Home phone: _____ County: _____																																																																													
License Class: _____ Primary radio interest: _____																																																																														
Check (<input checked="" type="checkbox"/>) bands/modes you can operate:																																																																														
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>160</th> <th>80</th> <th>40</th> <th>20</th> <th>15</th> <th>10</th> <th>6</th> <th>2</th> <th>220</th> <th>OTHER</th> </tr> </thead> <tbody> <tr><td>CW</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>FM</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>RTTY</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>SSB</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>MOBILE</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>PACKET</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>			160	80	40	20	15	10	6	2	220	OTHER	CW											FM											RTTY											SSB											MOBILE											PACKET										
	160	80	40	20	15	10	6	2	220	OTHER																																																																				
CW																																																																														
FM																																																																														
RTTY																																																																														
SSB																																																																														
MOBILE																																																																														
PACKET																																																																														
IF OPERATING PACKET, THE CALLSIGN OF YOUR PBBS IS: _____																																																																														

	160	80	40	20	15	10	6	2	220	OTHER
CW										
FM										
RTTY										
SSB										
MOBILE										
PACKET										

Can your home station operate without commercial power? [] Yes [] No

If yes what bands?

Signed: _____

Date: _____

To All Radio Amateurs:

The Amateur Radio Emergency Service (ARES) is a voluntary organization of licensed radio amateurs who have registered their capabilities and equipment for providing emergency communications as a public service to the community. The purpose of the ARES is to furnish communications in the event of natural disaster, when regular communications fail or are inadequate. Sponsored by ARRL, the ARES functions at the local level to meet local communications needs.

The ARES has a long history of public service going back to its formal inception in 1935. Since that time the ARES has responded countless times to communications emergencies.

Experience has proven that radio amateurs respond more capably in time of emergency when practice has been conducted in an organized group. There is no substitute for experience gained before the need arises. The ARES in each locality operates under the direction of the Emergency Coordinator (EC), whose function is to direct the activities of the ARES to maintain a state of readiness.

To register in the ARES, send the detachable Registration Form above directly to your EC, or to ARRL Headquarters for forwarding to your EC. League membership is not required for registration. Registration does not require possession of any specially designed equipment. All amateurs can be of assistance to the ARES. There is provision in the ARES for every amateur regardless of class of license, equipment owned, or personal circumstances.

Won't you join us in providing this essential Amateur Radio service?

DIVISION VOLUNTEERS

FIELD ORGANIZATION VOLUNTEERS—The key person to contact for information about ham radio activities in your area is your ARRL Section Manager (SM). Each SM is an elected official who serves a two-year term, and who appoints a variety of other people to assist in important Amateur Radio related activities. The Southwestern Division's section managers are:

- Arizona—Clifford E. Hauser, KD6XH
- Los Angeles (Los Angeles County)—Phineas J. Icenbice, W6BF
- Orange (Inyo, Orange, Riverside and San Bernardino counties)—Joe H. Brown, W6UBQ
- San Diego (Imperial and San Diego counties)—Patrick C. Bunsold, WA6MHZ
- Santa Barbara (San Luis Obispo, Santa Barbara and Ventura counties)—Jennifer J. Roe, AA6MX.

There are eight section-level appointments made by the Section Manager:

- Affiliated Club Coordinator (ACC)
- Bulletin Manager (BM)
- Official Observer Coordinator (OOC)
- Public Information Coordinator (PIC)
- Technical Coordinator (TC)
- Section Emergency Coordinator (SEC)
- Section Traffic Manager (STM)
- State Government Liaison (SGL)

These eight section leaders in turn recommend additional appointments. The STM appoints Net Managers (NM) and Official Relay Stations (ORS) in order to maintain the National Traffic System (NTS) at the local level. The PIC appoints Public Information Officers (PIO), usually attached to a local club for generating local PR. The BM appoints Official Bulletin Stations (OBS) for transmitting official ARRL and local bulletins of interest. The TC appoints Technical Specialists (TS) who may assist with local RFI problems and give general technical assistance (supporting the ARRL Technical Information Service), and be part of the "Elmer" effort to help new hams. The SEC appoints District Emergency Coordinators (DEC), Emergency Coordinators (EC), and Official Emergency Stations (OES), to administer the Amateur Radio Emergency Service (ARES). The OOC appoints Official Observers (OO), making them full-fledged members of the Amateur Auxiliary to the Federal Communications Commission (FCC). The State Government Liaisons (SGL), appoints Local Government Liaisons (LGL). Also, Assistant Section Managers (ASM) can be appointed by the SM for special assignments.

There are many opportunities for you to serve in the Field Organization. Contact your SM; his address and phone number are on page 8 of QST. Each SM is given space every month in QST for section news.

ADVISORY COMMITTEES—There are four national ARRL Advisory Committees where representatives are appointed by the division director with the chairman appointed by the President. Each committee has one representative from the division except for the new Spectrum Committee (which replaced the VHF Repeater Advisory Committee and the VHF/UHF Advisory Committee). Contest Advisory Committee (CAC): Mark Beckwith, WA6OTU (also Chairman); DX Advisory Committee (DXAC): Bill Mauzey, W6RT; Public Service Advisory Committee: Ron Boan, AK6Y; Spectrum Committee(SC): Karl Pagel, N6BVU (SC SW spokesman), David Gutierrez, WA6PMX, and James Fortney, K6IYK.

ASSISTANT DIRECTORS (AD)—They are appointed by the division director. In the Southwestern Division assistant directors are ARRL liaisons with local organizations and their appointment is mainly based on the request and recommendation of the groups they represent. The current SW ADs are: NK6A, W6AQ, K6CEO, KK6CG, KB6CMO, W7DRR, KA3DSE, N6EDX, N6ELP, W9FQN, N6FRW, WD6FWZ, KB6FXS, K6GGS,

W6GIC, N6GIW, NV6H, W6HUG, WA6HXM, KB6IYK, W7JU, K6KCI, WA6KKR, K7KYW, KD0KZ, KB6LAK, W6LPJ, WA6MVW, WA6MZV, KC6OJW, KB5OO, WA6OWM, WV7P, N6PC, KD6PCC, K6PHE, K6PQZ, K6QM, K6QS, K7QWR, K7RDG, W6RE, WA6RUZ, W6SWE, W6TKV, N6TME, KC7V, K6VE, WA6VNN, KC6WJM, WB6WWs, AF0X, WD6X, W7YU and W6ZH.

VOLUNTEER COUNSEL PROGRAM—Under this program, lawyers who are also licensed amateurs have agreed to assist other amateurs with ham radio-related legal problems, such as RFI and antenna restrictions. These lawyers will provide a free initial consultation to amateurs regarding ham radio legal problems. To date, the Southwestern Division attorneys that have agreed to serve are: KO6E, KG6FA, KB7FF, KB6FO, KC6I, WA3JPG, N6KQM, N6KUB, KY7M, N6MI, WA6MON, KV7O, WB6OLJ, WW6P, WA6PIR, WB7RJV, WA9STI, N6TFI, and WA6UUY.

VOLUNTEER CONSULTING ENGINEERS—VCEs are registered Engineers. Like the ARRL Volunteer Counsels they will provide a free initial consultation. However, they have special technical expertise in critical areas. For example, a VCE might act as an expert witness by providing technical data to municipal government representatives in support of a proposed Amateur Radio antenna and support structure. The VCEs in our division are W6EEN, AA7GP, WA6LQB, and WV6Y.

TECHNICAL AND EDUCATIONAL ADVISORS—TAs and EAs are ARRL national-level appointees who provide HQ with a volunteer resource. The current Southwestern Division TAs are: K7ES, K6GKU, K6JEY, W6ONT, W6ORG, KOOV, W7PMD, K7QWR, WC2S and K6UI. The EAs in our division are AA6BD and N6CIO.

AMATEUR RADIO COUNCILS—Local clubs form councils in order to better coordinate and promote activities important to the ham community. There are councils in all five of the sections within the division. They are: Amateur Radio Council of Arizona (ARCA)—chairman WB7RFY; Orange County Council of Amateur Radio Organizations (OCCARO)—chairman AB6KE; Los Angeles Area Council of Amateur Radio Clubs (LAACARC)—chairman AA6BC; San Diego County Amateur Radio Council (SANDARC)—chairman KC6QIF, and Tri-County Amateur Radio Council (TriCARS)—chairman AA6MX.

ARRL SW SPECIAL SERVICE CLUBS (SSC)—These clubs have gone through a screening process above and beyond other ARRL-affiliated clubs. They are expected to provide local public relations, emergency communications, training, technical advancement and other activities that further the goals of the Amateur Radio Service. Many SSCs have Award Managers who can check cards for some of the ARRL operating awards. The following are our Special Service Clubs (award managers are listed in parentheses): ARA of Long Beach (N6MRU), ARC of El Cajon (KA6RLX), AZ Repeater Association, Big Bear ARC, Carl Hayden High School, Citrus Belt ARC, Clairemont Repeater Association, Coconino County ARC (N7LQS), Conejo Valley ARC (K1FJM), Corona Norco ARC (W6TKV), Downey ARC (N6ATU), Green Valley ARC, Inland Empire ARC (WA6ZEF), London Bridge RA, Palomar ARC (WZ3P and N6ELP), Placentia Radio Watch, Relay Repeater Club, Riverside County ARA (K6JAD), San Fernando Valley ARC (KI6BU and N6PTI), Santa Barbara ARC (KB6ILV), Scottsdale ARC (W7ZMD), South Bay ARC (KA6ZTO), West Coast ARC (WB6ULU), Western ARA, West Valley ARC (W7LQM).

OTHER VOLUNTEERS—There are many of you who give in other ways toward the betterment of the Amateur Radio with or without an official ARRL title. There are a number of position-holders whose names are kept confidential such as members of an official FCC Amateur Auxiliary Local Interference Committee (LIC). Included are the QSL sorters who normally want to stay anonymous despite donating many unselfish hours; the Sixth

District QSL Bureau Manager is SW Division member Archie Willis, W6LPJ. We would also like to give thanks to those members that give talks, write articles and books, and help make video tapes. We must not forget Volunteer Examiners (VE) and ham instructors; both professional and volunteer, who not only help increase our ranks but also promote improved ham operators. Fellow members that are on the NTS Pacific Area Staff (PAS) include W6SX (chairman), W7EP, N6GIW, and AB6YR. Here are some of our division members that have appointments on national League committees: W6AQ (Public Relations), W6EJJ (Long Range Planning chairman), WA7GXD (Future Systems), W6IWO (Digital), K6IYK (219 MHz), KA9Q (Future Systems), WA6WZO (Administration & Finance and Coordinator Certification), W6XD (SAREX Working Group liaison and Spread Spectrum). Information on the bills can be found in QST, particularly January, 1994.

NEWEST ARRL VIDEO TRAINING COURSE

As a follow up to the successful ARRL Technician Class video training course, the ARRL in association with King Schools in San Diego have produced a comprehensive General Class licensing course. It will cover both the written and Morse code exams with three videocassettes, a companion course book, Morse code training software and optional exam-review software. The basic cost is \$99, the same price as for the Technician course. Both have a full guarantee; if you do not pass your FCC test within one year of your purchase, your money will be refunded. Special thanks goes to the many hams that volunteered their help in producing these two video courses, particularly W6CIC and KB6MCU. For more information call 1-800-322-NEWHAM. For information on ARRL testing call 1-800-9-ARRLVEC or your local Section Manager.

OUR EFFORT IN WASHINGTON

In addition to our HQ staff in Newington, CT, we maintain an office in Washington, DC., which includes the office of our General Council, Chris Imlay, N3AKD. It is important that we maintain a comprehensive government relations effort to facilitate more effective relationships with federal agencies, such as FCC and NTIA, which deal with spectrum usage in the U.S., and to enlist the support and understanding of Congress with respect to communications related legislation. Technical Relations Manager Paul Rinaldo, W4RI, covers the agency beat, as well as coordinating relationships with international organizations such as ITU. Steve Mansfield, N1MZB, Manager of Legislative and Public Affairs, is responsible for Congressional liaison. We also make good use of a Congressional consulting firm.

Of the many current efforts in Washington, the immediate concern is the potential effective loss of much of our 2.3 MHz band. The NTIA is in the process of releasing some 200 MHz of Federal Government primary spectrum which could include a big part of the 2.3 MHz ham band. Also, the FCC issued a Notice of Inquiry based on the upcoming release of spectrum to non-government use. The use and future need of this 13-cm is particularly important in our division. Input from many of you has been very helpful including groups in the division like the Cactus Interline System, SCRRAA, San Bernardino Microwave Society, and the Amateur Television Network. Stay tuned!

CALLSIGN CAR LICENSE PLATES

To get ham plates for your vehicle you need only to show your FCC license and pay the necessary fees. In Arizona, the cost is \$25 above the normal registration fee with an annual additional renewal fee of \$10. In California, the initial fee is \$21 with no extra fees for renewals. Callsign plates for motorcycles can be gotten in California but not in Arizona.

ALERT!

Please send a QSL, postcard, or letter to each of your U.S. Senators. Ask them to become CO-SPONSORS of the Amateur Radio Service Joint Resolution (SJ Res 90). While both Arizona Senators have already become co-sponsors, neither California Senator has yet signed on. Also, write your U.S. Representative and ask him/her to become a co-sponsor of HJ Res 199 (ARS Joint Resolution) and HR 2623 (ARS Volunteer Service Act). You can obtain the address of your Congressman from the beginning pages of your Yellow Pages or by calling your local library. The identical joint bills strongly support our service and state, "...all levels of government should facilitate and encourage amateur radio operation as a public benefit." Information on the bills can be found in QST, particularly January, 1994.

VANITY CALLSIGNS

The ARRL Executive Committee adopted the recommendations of its ad hoc committee on the FCC's "vanity" callsign proposal (PR Docket 93-305):

- After an initial phase-in period, all amateurs should be eligible.
- A one-time processing fee is preferable to a yearly fee.
- Previous holders should have first chance (without a fee).
- Extra, then Advanced, before opening it to all licenses.
- Clubs should be included in the program.
- Lost callsigns should be available after 2 years.

Remember the above summary is only our recommendation. It may be some time before the FCC determines the final rules and begins the program.

THE FRIENDSHIP AWARD AND MORE

The new Friendship Award can be earned by logging contacts with 26 stations ending with each of the 26 letters of the alphabet; using repeaters is okay. Submit your log with an SASE to ARRL HQ or one of the many participating ARRL-affiliated clubs. These clubs can also award the Old Timers Club (OTC) certificate for being licensed for 20 years and the Rag Chewers Club (RCC) certificate for reporting an half-hour QSO. Some of the more involved awards can also be obtained locally if you have the official application form required. In the list of Special Service Clubs you will find many have Award Managers which can check your QSL cards for Worked-All-States (WAS) and for VHF/UHF Century Club (VUCC). For the DX Century Club (DXCC), you need to find two official DXCC Field Checkers; your local DX club should be able to help. For more information on the ARRL Award Program write ARRL HQ.

QUEEN MARY STATION MANAGER RECEIVES AWARD

On May 5th the ARALB W6RO station celebrated its 15th Anniversary aboard the Queen Mary thanks to Nate Brightman, K6OSC. Nate established, maintained and staffed the station through these many years. Along with many volunteers the station remains open to the view of the public during visiting hours. At the last Southwestern Division Convention Nate was awarded the SWD Meritorious Service Award for his many years of service. He has been a ham for more than 35 years, involved with on-air activity daily with the Intercontinental Net, supportive to Red Cross communications, involved in several SWD Conventions, including chairmanship in 1985 and next year's one—both aboard the Queen Mary in Long Beach, CA. Also, Nate has been an active leader of the Associated Radio Amateurs of Long Beach, having held all club leadership positions at one time or another, including president. If you would really like to thank Nate, come and visit the station. Better yet, volunteer to become an operator. For more information contact Bill Holder, W6TNB, at 310-597-6544 before 8pm.

ANTENNA ORDINANCES - DIVISION AMATEURS RISE TO THE CHALLENGE

One of the most fundamental aspects of our Amateur Radio service is the need to install antennas of sufficient size and height. Without adequate antennas, the utility of our radio equipment is diminished. Although the FCC regulates Amateur Radio, state and local governments may regulate antenna installations based on public health, safety and aesthetics. During the past two years, more than a dozen cities and counties in Southern California and Arizona have passed ordinances regulating Amateur Radio antennas. Behind many of these local government actions is a success story involving local amateurs, radio clubs, and the ARRL.

Each of the above successes have similar elements:

- a dedicated core group of amateurs to organize and coordinate necessary actions
- local clubs and club councils to disseminate information and support public hearings
- ARRL officials such as your Section Manager, Director, Vice Director, General Counsel, and Headquarters staff to provide information and lend support
- effective use of PRB-1, the limited federal preemption of unreasonable antenna ordinances.

Another success story comes from Solana Beach, CA. Against what seemed to be overwhelming odds, a dedicated group of local amateurs, supported by the North Shores Radio Club, other SANDARC clubs and ARRL, convinced the city council that Amateur Radio was an important community resource. After several public hearings, a reasonable ordinance was passed. What's the payoff for this effort? The first antenna built under the new ordinance sits atop a hill at the Santa Fe Christian School, ready to provide educational opportunities to the students. One school project is planned to provide phone patch support to missionary groups overseas.

There are ongoing efforts in several cities that concern Amateur Radio antenna regulations. Among these are Los Angeles County, Santa Monica, San Diego and Sun City West, AZ. Core teams are formed in each place. If you are able to help in any of these efforts, please contact your local radio club or ARRL official for more information. Because the cities and counties exchange information and ordinances among themselves, it is important that we Radio Amateurs provide a united front to make sure we will continue to have reasonable antennas in the future.

Some cities that already have Amateur Radio antenna ordinances are now

EMERGENCY / DISASTER PREPAREDNESS DEMONSTRATED

With emergency and disaster agencies stretched to the limit and beyond, Amateur Radio operators once again donated their time and lent their communications expertise to make a real difference in the ability of these agencies to get the job done. Trained members of the Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Service (RACES) responded to calls for assistance during Southern California fires late last year, and the Northridge earthquake earlier this year.

Our best measure of readiness is a growing core of trained operators working as teams to get the job done. If you have not already done so, consider registering with your local ARES group. If there isn't one covering your area, now is the time to start a group. It's too late after the ground starts to shake. Just fill in the form on the back side of this page and send it to your ARRL Section Manager. He/she will put you in touch with your local group.

Soon after the Northridge 'quake tossed many of us out of our beds, Radio Amateurs were called to support relief and recovery efforts from one of the most damaging earthquakes experienced in this area. Amateurs from all over Southern California helped to staff Emergency Operations Centers across the Santa Clarita Valley, San Fernando Valley and Los Angeles Basin. More than 35 operators responded from Orange County in one of numerous demonstration of mutual aid to neighboring areas. The ARES Hospital Disaster Support Communication System (HDSCS) had 45 members available to support hospital communications needs. Packet radio links proved their effectiveness in handling messages. Long-distance communications were set up in the 40-meter band, with nets activated to handle health & welfare messages. Amateurs in Arizona were instrumental in relaying the H&W traffic.



1994 ARRL Southwestern Division Convention

San Diego, California, August 26 - 28, 1994 at the
Town & Country Hotel and Convention Center

Sponsored by: SANDARC, Inc.
(San Diego County Amateur Radio Council)

Convention site: Town & Country Hotel & Convention Center
500 Hotel Circle North, P.O. Box 80090
San Diego, CA 92128

Special Hotel Rates for ARRL Convention - Call (800) 77-ATLAS
Parking at hotel - \$3.00

How Many	Pre-registration (May 15 to Aug. 10, '94)	Cost	Amount
_____	Registration At Door (Aug. 11 to Show)	\$15.00	_____
_____	Saturday Night Banquet Choose one: Prime Rib Chicken Florentine Vegetarian	\$35.00	_____
_____	Sunday DX Breakfast	\$18.00	_____
_____	Saturday Ladies' Luncheon	\$21.00	_____
_____	Friday Night Harbor Cruise (Bus, Dinner, Open Bar & Cruise)	\$55.00	_____
_____	Total Enclosed	\$	_____

Badge Information (Print or Type)

Name _____ Call _____

Name _____ Call _____

Name _____ Call _____

Address _____

City _____ State _____ ZIP _____

Make Checks payable to : SANDARC, Inc.

Free admission to Youngsters, 16 years & under accompanied by an adult.

Mail this form & Check to: 1994 ARRL S.W.Div. Convention

Bob Boehme, W6RHV, Registration Chairman
10340 Everell Place, Santee, CA 92071
For additional information, call (619) 278-4284



TALK-IN FREQUENCY
145.32 - 107.2 PL

Fried Heyn, WA6WZO
Director, ARRL Southwestern Division
American Radio Relay League
225 Main Street
Newington, CT 06111 USA



Time Dated Material

Nonprofit Organization
U. S. POSTAGE
PAID
Hartford, CT
Permit No. 2929

CONV/NEWS 004002756 062194SB
Calif Polytechnic State W6BHZ
Dean Wood KC6IZR
UU Box 53
Cal Poly State University
San Luis Obispo CA 93407

1994 ARRL S. W. Division Convention
San Diego, California, August 26-28, 1994
Town & Country Convention Center



SOLVING INTERFERENCE PROBLEMS

RFI PROBLEMS: Whether you are having problems with interference from or to electrical/electronic devices, the Technical Coordinator in your section or one of his assistants (Technical Specialists) may be able to help. Remember, if you are dealing with a neighbor, tact and understanding will go a long way in getting cooperation. In addition, you may find it helpful to purchase the ARRL book, *Radio Frequency Interference: How To Find It And Fix It*. Also, a free pamphlet for the consumer is available from HQ, "What to do if you have an electronic interference problem."

REPEATER-TO-REPEATER QRM: These kinds of problems are best worked out between the repeater groups involved. While it is not illegal to have an uncoordinated repeater, the FCC rules give its trustees the primary responsibility for resolving any interference to coordinated repeaters. Each local area has long-established coordination bodies that volunteer their time and effort. In Arizona, the ARCA Frequency Committee is headed by W7HSG. In Southern California, there are three groups: the Two-Meter Area Spectrum Management Association (TASMA) headed by N6OMS, the 220 MHz Spectrum Management Association (220 SMA) headed by K6IYK, and the Southern California Repeater and Remote Base Association (SCRRA) headed by WA6FVC.

INTENTIONAL INTERFERENCE: The ARRL Official Observers (OO), while mainly concerned with unintentional violations, are part of the Volun-

teer Monitor Program (VOLMON) which includes Local Interference Committees (LIC). Most LICs are formed locally on a case-to-case basis and gain official standing through the Section Manager. They are an important part of the Amateur Auxiliary to the FCC Field Operations Bureau (FOB). The Auxiliary locates violators using FCC-approved radio direction finding (RDF) procedures and gathers evidence in a manner that facilitates prosecution when required. The recent new national agreement between the ARRL and the FCC FOB was made at the request of the FCC to better streamline the system.

When encountering jamming NEVER REACT to it on the air. With the exception of turning off a repeater, deliberate interference and obscenity should be completely ignored. If the problem is a serious ongoing problem, make a log and report it to your Section Manager (see page 8 of QST). Please DO NOT CONTACT THE FCC yourself. The less we burden the FCC, the more effective action they will give when we have a well documented case to present.

NON-AMATEUR INTRUSION: The volunteer group that deals with non-amateur stations that cause harmful interference within our bands is under the ARRL Monitoring System. The appropriate FCC monitoring facilities are notified of the major cases. After analysis, many of the most important cases are submitted to the FCC Treaty Branch.

FIELD FORUM



VOLUME 10 = NUMBER 3
JULY = 1994 = EDITION

Red Cross, ARRL Pen New Agreement

On April 1, ARRL President George Wilson III, W4OYI, and American Red Cross Senior Vice President William H. Reno signed a new agreement, setting forth terms of mutual recognition and cooperation between the two organizations. The League and the Red Cross have enjoyed a formal relationship since 1940. The last time the Red Cross/ARRL agreement was updated was in 1974.

The new agreement calls for closer cooperation between local Red Cross chapters and ARES organizations, and the development of a set of guidelines for the handling of health-and-welfare traffic by amateurs and Red Cross personnel during disasters.

Red Cross chapters are responsible for establishing, coordinating, and maintaining continuity of communications during disaster-relief operations whenever normal communications channels are disrupted or overloaded. There are approximately 2,600 chapters across the United States. Each chapter is responsible for developing a special disaster preparedness and relief committee composed of the best-qualified volunteers available. This committee studies the disaster hazards of their territory, surveys local resources for personnel, equipment, and supplies, including transportation and emergency communication facilities, that are available for disaster relief. It also formulates cooperative plans and procedures with local governmental agencies and private organizations for carrying on relief operations should a disaster occur. Disaster Services at national headquarters coordinates the total resources of the organization for utilization wherever needed for large disasters.

The League, through ARRL HQ, will continue to have regular liaison with American Red Cross HQ. This liaison provides for the closest possible cooperation and direct operational assistance by the ARRL in emergency communications planning, and in the coordination of Amateur Radio communications facilities for disaster relief operations.

Red Cross chapters further this cooperative effort by requesting that local ARRL ARES and NTS personnel serve as Red Cross disaster volunteers for emergency communications. ARRL ARES and NTS volunteers are encouraged to take part in pre-disaster planning, and work with the local chapter to provide Amateur Radio communications equipment and volunteers, and to meet the needs of the disaster communications plan. Specific tasks include:

1. The alerting and mobilization of ARRL volunteers in

accordance with a prearranged plan.

2. The establishment and maintenance of fixed, mobile, and portable station emergency communication facilities for local radio coverage and point-to-point contact between Red Cross officials and locations, as required.

3. Maintenance of the continuity of communications for the duration of the emergency period or until normal communications channels are substantially restored.

The League will be supplying Red Cross with lists of local Emergency Coordinators. In turn, Red Cross will supply the League with chapter addresses and points of contact which will be shared with the Field Organization.

Health and Welfare Traffic

The ARRL recognizes that the Red Cross, working with officials in the disaster area, may need to establish guidelines concerning the acceptance, transmission, and distribution of health-and-welfare (disaster welfare) traffic by Amateur Radio. It is imperative that ARES personnel handle traffic in adherence to the guidelines provided by American Red Cross personnel in the disaster area.

Red Cross chapters, not in the disaster area, may also have the need for health-and-welfare traffic handling by Amateur Radio. ARES and NTS members are encouraged to work with Red Cross chapters to provide this service.

The Red Cross and ARRL will develop a specific set of operational guidelines for the management of the health-and-welfare inquiry function both at the national and local levels.

Detailed operating plans will be developed by the local Red Cross chapter in cooperation with local ARES and NTS personnel. The Red Cross will recommend to its chapters that membership on disaster preparedness and relief committees include representation from the ARRL through its local ARES and NTS organizations.

Copies of the new agreement are available from the Field Services Department, ARRL Headquarters. 

INSIDE:

<input type="checkbox"/> The ARRL Hiram P Maxim 125th birthday party	3
<input type="checkbox"/> SET sign up for new hams	4
<input type="checkbox"/> VRC meets in St Louis	5
<input type="checkbox"/> New partnership-Southern Florida and ARES	6
<input type="checkbox"/> Midwest floods update	7

CONVENTION HIGHLIGHTS

DX BREAKFAST - VISIT PETER 1 ISLAND, THE RAREST AND MOST INACCESSIBLE SPOT ON EARTH WITH THE 3Y0PI DXPEDITION CREW.

MASSIVE EXHIBITS - Over 100 booths. Talk directly to the manufacturers about equipment.

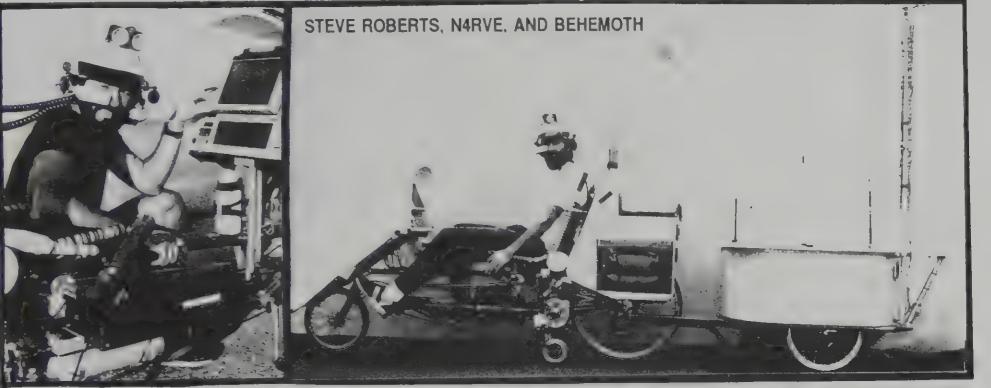
ROMANTIC SAN DIEGO HARBOR DINNER CRUISE

AN AUCTION IN THE PATIO FOR USED GEAR.

LADIES LUNCHEON AND ALL DAY ACTIVITIES.

MYSTERIOUS WOUFF HONG CEREMONY at midnight!

DELICIOUS PRIME RIB, CHICKEN FLORENTINE, OR VEGETARIAN BANQUET with Dave Bell, W6AQ as Master of Ceremonies and speaker Steve Roberts, N4RVE telling us about his ham radio and computerized touring bicycle called BEHEMOTH. Steve will have his famous bicycle at the convention.



ARRL EMC FORUM

Electromagnetic Compatibility and the Radio Amateur

At the 1994 ARRL Southwestern Division Convention on Friday, August 26, 1994, Ed Hare, KA1CV, ARRL Laboratory Supervisor, is presenting a 6 hour training forum on electromagnetic compatibility and RFI. This comprehensive course will emphasize interference to consumer-electronics equipment, with additional information about electrical and power line interference, computers and EMC standards and regulations that affect the Amateur Radio Service. This course is designed for a wide audience, ranging from ARRL Technical Coordinators, local cable-TV operators and telephone technicians and the big-gun station that has some big-gun RFI problems.

There is a nominal charge for course materials (less than \$10.00). The ARRL RFI book, *Radio Frequency Interference - How to Find It and Fix It*, will be made available for \$15 but not required for the course. To register for this interesting forum, or for information about the convention, contact: Sybil Allbright, W6GIC, 8658 Encino Ave., San Diego, CA 92123 or call (619) 278-4284.

STEVE ROBERTS, N4RVE, AND BEHEMOTH

July, 1994

Southwestern Division Communicator

Page 5

IN CLOSING...

Amateur Radio must change with the times, "High Tech—High Touch." It is important that we begin developing a strategic plan to guide the ARRL in preparing for the opportunities and challenges of the future. With this in mind the Board members and officers are having meetings separate from the regular business of Board meetings. A draft plan will be completed by the end of the year. Your director would appreciate hearing your thoughts on this most important effort; we must as much as possible, make our own future.

Currently the League has increased its service to its members, the general ham population, and society. Not only is the ARRL a membership organization but also now much more of a volunteer organization. Many League programs depend on the individual ham and a local group for their success with HQ and/or local leaders giving the necessary guidance and support.

There are two new characteristics of Amateur Radio that are positive but require special attention. First, since it has become easier to get into ham radio, we have had an extra large increase in the number of fellow hams. With the increased numbers we must better involve them in the mainstream and fellowship of ham radio. Second, as Amateur Radio has found many more ways and places of value, it has become more specialized and

diversified. A natural result is fragmentation; we must meet this challenge with increased efforts to find common goals to better unify us for the future.

Most of us are hams because it is great fun. The one most important common need is spectrum. Amateur Radio is a wonderful hobby but it is because we are a service we have the spectrum in the first place. Remember your ham contribution to the betterment of mankind is important!

See you at the Convention in San Diego. Please make sure you visit us at the ARRL booth as well as the ARRL forum; we would like you to share your thoughts with us.

Ed



Art

Fried Heyn, WA6WZO
(714) 549-5816
MCI Mail: 254-2030
Packet: WA6WZO @ WF6O

Art Goddard, W6XD
(714) 556-4396
MCI Mail: 570-0404
Packet: W6XD @ WF6O

Fried Heyn, WA6WZO
Director, ARRL Southwestern Division
American Radio Relay League
225 Main Street
Newington, CT 06111 USA



Time Dated Material

Nonprofit Organization
U. S. POSTAGE
PAID
Hartford, CT
Permit No. 2929



CONV/NEWS 004002756 062194 SR
Calif Polytechnic State W6BHZ
Dean Wood KC6IZR
UU Box 53
Cal Poly State University
San Luis Obispo CA 93407

SOLVING INTERFERENCE PROBLEMS

RFI PROBLEMS: Whether you are having problems with interference from or to electrical/electronic devices, the Technical Coordinator in your section or one of his assistants (Technical Specialists) may be able to help. Remember, if you are dealing with a neighbor, tact and understanding will go a long way in getting cooperation. In addition, you may find it helpful to purchase the ARRL book, *Radio Frequency Interference: How To Find It And Fix It*. Also, a free pamphlet for the consumer is available from HQ, "What to do if you have an electronic interference problem."

REPEATER-TO-REPEATER QRM: These kinds of problems are best worked out between the repeater groups involved. While it is not illegal to have an uncoordinated repeater, the FCC rules give its trustees the primary responsibility for resolving any interference to coordinated repeaters. Each local area has long-established coordination bodies that volunteer their time and effort. In Arizona, the ARCA Frequency Committee is headed by W7HSG. In Southern California, there are three groups: the Two-Meter Area Spectrum Management Association (TASMA) headed by N6OMS, the 220 MHz Spectrum Management Association (220 SMA) headed by K6IYK, and the Southern California Repeater and Remote Base Association (SCRRA) headed by WA6FVC.

NON-AMATEUR INTRUSION: The volunteer group that deals with non-amateur stations that cause harmful interference within our bands is under the ARRL Monitoring System. The appropriate FCC monitoring facilities are notified of the major cases. After analysis, many of the most important cases are submitted to the FCC Treaty Branch.

ARRL AMATEUR RADIO EMERGENCY SERVICE REGISTRATION FORM																																																																							
Name _____	Call _____	Address: _____	City: _____	State/Prov: _____	Zip/PC: _____	Home phone: _____	County: _____																																																																
License Class: _____		Primary radio interest: _____																																																																					
Check (✓) bands/modes you can operate:																																																																							
<table border="1"> <thead> <tr> <th colspan="10">IF OPERATING PACKET, THE CALLSIGN OF YOUR PBS IS: _____</th> </tr> <tr> <th colspan="10">Can your home station operate without commercial power? [] Yes [] No</th> </tr> <tr> <td colspan="10">If yes what bands? _____</td> </tr> </thead> <tbody> <tr> <td>CW</td> <td>FM</td> <td>RTTY</td> <td>SSB</td> <td>MOBILE</td> <td>PACKET</td> <td>160</td> <td>80</td> <td>40</td> <td>20</td> <td>15</td> <td>10</td> <td>6</td> <td>2</td> <td>220</td> <td>OTHER</td> </tr> <tr> <td> </td> </tr> </tbody> </table>										IF OPERATING PACKET, THE CALLSIGN OF YOUR PBS IS: _____										Can your home station operate without commercial power? [] Yes [] No										If yes what bands? _____										CW	FM	RTTY	SSB	MOBILE	PACKET	160	80	40	20	15	10	6	2	220	OTHER																
IF OPERATING PACKET, THE CALLSIGN OF YOUR PBS IS: _____																																																																							
Can your home station operate without commercial power? [] Yes [] No																																																																							
If yes what bands? _____																																																																							
CW	FM	RTTY	SSB	MOBILE	PACKET	160	80	40	20	15	10	6	2	220	OTHER																																																								
To All Radio Amateurs: The Amateur Radio Emergency Service (ARES) is a voluntary organization of licensed radio amateurs who have registered their capabilities and equipment for providing emergency communications in the event of natural disasters, man-made calamities, or other emergencies. Sponsored by ARRL, the ARES functions at the local level to meet local communications needs.																																																																							
The ARES has a long history of public service going back to its formal inception in 1935. Since that time the ARES has responded countless times to communications emergencies. Experience has proven that radio amateurs respond more capably in time of emergency when practice has been conducted in an organized group. There is no substitute for experience gained before the need arises to direct the activities of the ARES to maintain a state of readiness.																																																																							
To register in the ARES, send the detachable Registration Form above directly to your EC, or to ARRL Headquarters or forwarding to your EC. League membership is not required for registration. Registration does not require possession of any specially designed equipment. All amateurs can be of assistance to the ARES. There is provision in the ARES for every amateur regardless of class of license, equipment owned, or personal circumstances.																																																																							
Won't you join us in providing this essential Amateur Radio service?																																																																							
Signed _____ Date _____																																																																							

FIELD FORUM



VOLUME 10 = NUMBER 3
JULY = 1994 = EDITION

Red Cross, ARRL Pen New Agreement

On April 1, ARRL President George Wilson III, W4OYI, and American Red Cross Senior Vice President William H. Reno signed a new agreement, setting forth terms of mutual recognition and cooperation between the two organizations. The League and the Red Cross have enjoyed a formal relationship since 1940. The last time the Red Cross/ARRL agreement was updated was in 1974.

The new agreement calls for closer cooperation between local Red Cross chapters and ARES organizations, and the development of a set of guidelines for the handling of health-and-welfare traffic by amateurs and Red Cross personnel during disasters.

Red Cross chapters are responsible for establishing, coordinating, and maintaining continuity of communications during disaster-relief operations whenever normal communications channels are disrupted or overloaded. There are approximately 2,600 chapters across the United States. Each chapter is responsible for developing a special disaster preparedness and relief committee composed of the best-qualified volunteers available. This committee studies the disaster hazards of their territory, surveys local resources for personnel, equipment, and supplies, including transportation and emergency communication facilities, that are available for disaster relief. It also formulates cooperative plans and procedures with local governmental agencies and private organizations for carrying on relief operations should a disaster occur. Disaster Services at national headquarters coordinates the total resources of the organization for utilization wherever needed for large disasters.

The League, through ARRL HQ, will continue to have regular liaison with American Red Cross HQ. This liaison provides for the closest possible cooperation and direct operational assistance by the ARRL in emergency communications planning, and in the coordination of Amateur Radio communications facilities for disaster relief operations.

Red Cross chapters further this cooperative effort by requesting that local ARRL ARES and NTS personnel serve as Red Cross disaster volunteers for emergency communications. ARRL ARES and NTS volunteers are encouraged to take part in pre-disaster planning, and work with the local chapter to provide Amateur Radio communications equipment and volunteers, and to meet the needs of the disaster communications plan. Specific tasks include:

1. The alerting and mobilization of ARRL volunteers in

accordance with a prearranged plan.

2. The establishment and maintenance of fixed, mobile, and portable station emergency communication facilities for local radio coverage and point-to-point contact between Red Cross officials and locations, as required.

3. Maintenance of the continuity of communications for the duration of the emergency period or until normal communications channels are substantially restored.

The League will be supplying Red Cross with lists of local Emergency Coordinators. In turn, Red Cross will supply the League with chapter addresses and points of contact which will be shared with the Field Organization.

Health and Welfare Traffic

The ARRL recognizes that the Red Cross, working with officials in the disaster area, may need to establish guidelines concerning the acceptance, transmission, and distribution of health-and-welfare (disaster welfare) traffic by Amateur Radio. It is imperative that ARES personnel handle traffic in adherence to the guidelines provided by American Red Cross personnel in the disaster area.

Red Cross chapters, not in the disaster area, may also have the need for health-and-welfare traffic handling by Amateur Radio. ARES and NTS members are encouraged to work with Red Cross chapters to provide this service.

The Red Cross and ARRL will develop a specific set of operational guidelines for the management of the health-and-welfare inquiry function both at the national and local levels.

Detailed operating plans will be developed by the local Red Cross chapter in cooperation with local ARES and NTS personnel. The Red Cross will recommend to its chapters that membership on disaster preparedness and relief committees include representation from the ARRL through its local ARES and NTS organizations.

Copies of the new agreement are available from the Field Services Department, ARRL Headquarters. 

INSIDE:

<input type="checkbox"/> The ARRL Hiram P Maxim 125th birthday party	3
<input type="checkbox"/> SET sign up for new hams	4
<input type="checkbox"/> VRC meets in St Louis	5
<input type="checkbox"/> New partnership-Southern Florida and ARES	6
<input type="checkbox"/> Midwest floods update	7

Amateur Auxiliary Restructuring Marks

As a result of meetings between ARRL President George Wilson III, W4OYI, and FCC staff and Commissioners in Washington, basic changes in the structure and function of the Amateur Auxiliary program were indicated. These changes are important, and are expected to lead the program into the next century. They are reflected in an all new Amateur Auxiliary Training Manual and a new ARRL/FCC national agreement executed just recently, which have been sent to all Section Managers, Official Observer Coordinators, and Official Observers.

The major change is being implemented at the explicit instruction of Commission staff in the Enforcement Division, Field Operations Bureau: Henceforth, Amateur Radio cases that are to be presented to the FCC for enforcement, must be submitted to the Enforcement Division, Field Operations Bureau, in Washington. This will be a function reserved for the ARRL Headquarters staff and General Counsel. There are to be no exceptions to this policy. The primary interface between the Official Observers, and ultimately the FCC, will be through the Official Observer Coordinator (under delegated authority from the Section Manager) and the ARRL Headquarters staff. As a result, the Auxiliary's Regional Monitoring Stations are no longer required and are being phased out, effective immediately.

The new structure places additional responsibility for the resolution of cases through voluntary means, and ultimately the development of evidence in difficult cases, on the shoulders of the OOC. The OOC will work with the OOs (and Local Interference Committees) and ARRL Headquarters staff in the development of cases, and will be able to issue the "heavy duty" advisory notice (FSD-214) which was formerly a function of the Regional Monitoring Station. The Headquarters staff also assumes additional responsibility. The staff will work directly with the OOC on evidence gathering and other case-related mat-

ters. When evidence is to be forwarded to the FCC by ARRL Headquarters, it will first be reviewed by the League's General Counsel for sufficiency, and a recommendation on whether it should be submitted or not, and remand it to the Headquarters staff and OOC for additional processing where necessary. Once this review has been completed and the package is ready to go forward, the Headquarters staff will transmit it to the League's General Counsel for presentation to FCC staff in Washington.

Advantages

There are several advantages to the new restructuring scheme. First, it streamlines the organizational design. Improved communications should result. Single points of contact will reduce complexity and confusion, and there will be increased quality control of cases to be forwarded to FCC for action. These should all result in a higher batting average for Auxiliary-referred cases. While the Commission has acted in some cases in the past couple of years, its staff is still limited in the resources they have available for amateur enforcement. Accordingly, the agency simply will not be able to prosecute each case referred to it. The FOB staff has indicated that they will pursue the most egregious cases with the greatest potential for deterrence value within the amateur community.

Outlook

There's no doubt about it, these past couple of years have been difficult for the Auxiliary owing to the lack of support we have received from the Commission on some high-visibility cases. The morale of program participants has suffered, and the credibility of the program in the eyes of the amateur community has been reduced. But, there's light at the end of the tunnel. Recent staff changes at the Commission, and the development of a new program structure and training manual will give us all a chance to work to meet the great potential of the program. Other

FEDERAL COMMUNICATIONS COMMISSION

Field Operations Bureau
San Juan/Santa Isabel Office
U.S. Federal Building, Room 747
150 Carlos Chardon Avenue
San Juan, PR 00918-1731
April 13, 1994
NEWS RELEASE

The San Juan Office of the Federal Communications Commission issued a Notice of Apparent Liability to Monetary Forfeiture (NAL) for \$7,000 to amateur radio operator Juan Anthony Rodriguez (NP4VG) of Catano, PR. The forfeiture was assessed for violation of Section 97.101(d) of Commission's Rules for willful interference.

On March 25, 1994 inspectors from the San Juan Office investigated repeated interference complaints on the amateur frequency of 145.350 MHz. They used close-in direction finding techniques to trace the interfering radio signal to a residence located at Las Lomas Ward in Cubuy, Canovanas, PR. The transmitter identified on the air with a Morse identifier was NP4VG.

This action was taken to solve a long-standing dispute between the licensees of amateur repeater stations NP4VG and WP4CNU. When the interference complaints began, both parties were reminded of the Commission rules con-

tained in Docket 85-22. FCC local officials met individually with both trustees in an attempt to facilitate the resolution process, but ultimately returned the case to the local frequency coordinator.

PR/VI Volunteer Frequency Coordinators, Inc. (PR.VI VFC) was recognized by local repeater trustees and by the American Radio Relay League as the frequency coordinator for Puerto Rico and the U.S. Virgin Islands. Based on information submitted by PR/VI VFC the FCC local office found that Mr. Rodriguez' repeater was decoordinated by this organization, which is allowed under Docket 85-22. The San Juan Office has no evidence that other than acceptable known criteria was used by PR/VI VFC when it decoordinated Mr. Rodriguez' repeater. Part of the decoordination process was for Mr. Rodriguez' repeater to stop operation. Mr. Rodriguez failed to stop operations after receipt of a stop-operation order from the FCC local office in response to the complaints of interference and in support of the local coordinator's decision.

Mr. Rodriguez was found to be willfully and maliciously causing interference to ongoing amateur communications, constituting a violation of Section 97.101(d).

For further information please contact Mr. William C. Berry, Engineer in Charge, San Juan Office, at (809) 756-5567.

-FCC-

New Era for Volunteer Monitoring

good signs have appeared: Numbers of OOs across the country have reached new record highs, and Official Observers, generally, have shown a deeper understanding of the true mission of the program, and have helped in numerous instances in cleaning up our bands. The League's Board of Directors and staff have recognized this, and commend OOs' efforts. These efforts will be rewarded and are appreciated by the League and the amateur community at large.

Q: What about existing local agreements between us and the local FCC field offices? Ours worked pretty well.

A: Local memoranda of understanding between FOB field offices and section ARRL officials are essentially set aside. The conveyance of information from the Auxiliary volunteers to the FOB is now handled principally through ARRL's Washington office. However, coordination of information gathering *prior* to submission to FOB may be handled through local Auxiliary and field office interaction. It is granted that some field offices have enjoyed favorable working relationships with Auxiliary personnel, and we expect them to continue, but likely to a lesser degree.

Q: Can an FCC field office still refer complaints to us?

A: It is appropriate for a field office to refer a complaint to your office. You would handle the complaint in the same manner as one received from anyone else (while according it the priority it clearly deserves); that is, in accordance with the guidelines and flow chart specified in the manual. The critical point is that, when and if it comes time to submit evidentiary materials to FOB and enforcement is requested, this will be handled only by the ARRL's Washington office. The development of these materials would be directed by your OOC, in consultation with the Field Services Department staff here at Headquarters.

Q: What is the OOC's function in handling these complaints?

A: In the case that has reached the point of OOC attention, and it is decided (on advice of ARRL HQ) that the case should be pursued, the OOC would work to develop the evidence package in accordance with the comprehensive guidelines specified in Chapter 5 of the manual. However, federal budget limitations make it very difficult for the FCC to engage in enforcement efforts necessary to ensure rules compliance in the Amateur Radio Service. Therefore, the importance of voluntary dispute resolution, and the advice/mediation function of the OOC cannot be overstated. OOCs should make absolutely certain that all appropriate measures of voluntary resolution have been exhausted, and that the case is of the utmost seriousness and where an enforcement action would have a maximum deterrence value on a national scale, before a case is referred to ARRL HQ for transmittal through channels to FOB Washington.

Q: Will the new program result in faster action by the FCC?

A: Concerning FCC processing times under the new program guidelines and structure, it should take significantly less time than it has previously. The problems in the past have included "mixed signals" received by the FCC at various levels, and improperly conducted evidence gathering efforts. Under the new structure, there is a single point of contact, and quality control of evidence packaging, so the Commission should be able to respond more expeditiously. The new FCC-ARRL agreement tasks the FCC with advising "ARRL, upon request and in a timely manner as possible, of the actions taken, or reasons why actions were not taken..." Most of the time involved in a case will be consumed by the development of the evidence package by the OOC.

Coming to Your Local Airwaves— The ARRL Hiram P Maxim 125th Birthday Party

By Warren C. Stankiewicz, NF1J
ARRL Assistant Contest Manager

For those of you who missed last month's Section Leader, there's a big event coming up in September you simply can't afford to miss. This September 2 would have been the 125th birthday of Hiram P Maxim, ARRL co-founder. We're going to use this anniversary for a get-together on the air of hams across the country to show off the ARRL and you—it's volunteers.

How? From 0000Z September 2 until 2400Z September 12, all League volunteers, elected officials, and staff will be invited to add "/125" when they sign their calls to celebrate this occasion. Hams who work at least 25 of these stations will be eligible for a nice certificate. The award will be endorsable in increments of 25 up to 125.

For this to work, however, we're going to need something important—you! The more of the ARRL family we can get involved, the more people will be able to work enough stations for their certificate. There is another benefit to the

program, however. All stations signing "/125" will also exchange their ARRL position (Section Manager, Official Bulletin Station, Assistant Director, ...you get the idea). This may be our best chance yet to publicize the Field Organization, who they are, and what they do.

In keeping with that idea, we're going to allow contacts to be made on any mode on any band. We're especially hoping for a large turnout on the VHF/UHF bands, and will allow repeater contacts to count (under certain conditions). Our hope is that as many of you as possible will make the effort to check into as many repeaters as you can during the period, so that we can expose newer hams to the ARRL, its Field Organization, and what it offers for them. Just about every repeater we know of has some kind of net on it at least once a week or so, why not check in, or announce that you'll be there after the net for anyone who wants a contact?

By now, you're probably asking, "What do I need to do to participate? Do I need to register with anyone?" No—just get on the air once the Party begins, and start making contacts. Can I get a certificate? Sure—you're just as welcome to work other "/125" stations as anyone else! The full details of the Party, along with a sample certificate, and a list of all the appointments that can participate as "/125" stations will be in August *QST*. Until then, please get the word out and make your plans now.

Sign Up New Hams Now for SET

The theme of this year's Simulated Emergency Test is: New Hams, New Blood for ARES! With record numbers of new hams entering the ranks of Amateur Radio, and with their interests focused on repeater and public service activities, ARES leaders should enjoy a windfall of new recruits for their programs and especially for this fall's SET. To emphasize the importance of getting new hams into your ARES programs, extra points will be awarded for each new ham you get to participate in your SET this year.

The ARRL Simulated Emergency Test is a nationwide exercise in emergency communications, administered by ARRL Emergency Coordinators and Net Managers. Both ARES and the National Traffic System (NTS) are involved. The SET weekend gives communicators the opportunity to focus on the emergency-communications capability within the community while interacting with NTS nets. SET weekend this year is October 15-16.

Purpose of SET

1. To find out the strengths and weaknesses of ARES and NTS, the Radio Amateur Civil Emergency Service (RACES) and other groups in providing emergency communications.
2. To provide a public demonstration—to served agencies such as Red Cross, Civil Preparedness, and through the news media—of the value to the public that Amateur Radio provides, particularly in time of need.
3. To help radio amateurs gain experience in communications using standard procedures and a variety of modes under simulated-emergency conditions.

Format

The scoring format reflects broad objectives and encourages use of digital modes for handling high-volume traffic and point-to-point Welfare reports out of the affected simulated-disaster area. Participants will find SET an opportunity to strengthen the VHF-HF link at the local level, thereby ensuring that ARES and NTS are working in concert. The SET will give all levels of NTS the chance to handle exercise-related traffic. The guidelines also recognize tactical traffic on behalf of served agencies.

Test messages should carry the word "TEST" before the precedence; that is, "Test Priority" on phone and "TEST P" on cw. The text of such messages should also begin with the words "TEST MESSAGE."

Although October 15-16 is the official weekend, ARES units and other groups are free to conduct their SETs anytime during September 1 and November 30 if an alternative date is preferred. The activity period should not exceed 48 hours. The deadline for receipt of all reports is January 31, 1995. A complete array of reporting forms will be mailed to affected Field Organization appointees. As a reminder, after the SET weekend, ECs and Net Managers must send one set of their completed forms to ARRL HQ, 225 Main Street, Newington, CT 06111, one set to the Section Emergency Coordinator (SEC) or Section Traffic Manager (STM), and keep the other copy for their records.

Preparing for SET

Emergency Coordinators

1. Sign up all available amateurs in the area under your jurisdiction and work them into your SET plans. Make special efforts to attract new Technicians as outlined above.
2. Call a meeting of all ARES members and prospective members to briefly outline (no details!) SET activities, and give general instructions. Do not divulge the exact time or nature of the test to them at this time. This should come as a surprise. Take this opportunity to register new ARES members and get up-to-date information on others. Hold an on-the-air meeting if it's not possible to meet in person.
3. Contact served agencies and explain the intent and overall purpose of the SET. Offer to send test messages to other branches of their agencies, and invite officials to your ARES meetings and SET operating sites.
4. Contact officials of any adjacent communities having no active amateurs and offer to provide representation in amateur networks for them as well.
5. Arrange publicity in consultation with an ARRL Public Information Officer in local newspapers and radio/TV stations by preparing an announcement and/or inviting the press to observe your group's SET operation.

6. Set up liaison with one or more served agencies so you will have an outlet for a report.

7. Formulate your plans for a simulated emergency (a serious fire, an ice storm, a power failure, examples), a broken gas line, etc., etc., but please be realistic.

During the SET

1. Announce the emergency to all served agencies.
2. Have designated stations (not necessarily real emergency messages) ready to go.
3. Emphasize tactical communications.
4. As warranted by traffic volume, switch stations and relay to your section net to another section.
5. Operate at least one station on an emergency-only basis. Or, if you like, have several stations to operate through different frequencies.

After the SET

An important post-SET activity is to debrief all participants. ARES (and RACES) members should be encouraged to share their impressions of what went well and what could be improved upon in the drill. Emphasize the teamwork of all groups involved. Report results in your club newsletter, photos, clippings and other publications.

National Traffic System

The main function of NTS is to handle traffic in a systematic manner to support emergency activities and to provide a means for the exchange of traffic between regions.

Normal NTS routing should be followed whenever possible, which should be routed as far as possible from the affected region when delivery can be expedited. If necessary, traffic may be directed to bypass a normal route.

The interface between NTS and other amateur radio nets, particularly at the regional level, is often the most difficult to handle. On the section net lies with the responsibility for determining how much traffic to expect NTS personnel to accept.

At least one net session should be held to discuss the emergency power. Plan a session to determine how many stations are needed to handle traffic when a station is unable to operate on emergency power.

Summary

One of the first steps on the road to success is to sign up as many amateurs as possible, and especially those with varied interests coming out of the amateur ranks. Encourage them to learn more about how emergency communications work, and sign up new members. Many of those offering to help with the planning process will be willing to explain what's going on to them, and they will be more likely to become a permanent part of your club's emergency preparedness plan.

more NTS local/section nets (if you don't already have liaison) so messages out of the local area.

und a simulated disaster. Possible "plots" include: a flood, a ssing person, a serious accident (automobile, bus, aircraft, for nd so forth. Elaborate on the situation by developing a scenario,

situation. Activate the emergency net. Dispatch mobiles to

originate messages on behalf of served agencies. Test mes- equests for supplies. Simulated emergency messages (just like uld be signed by an authorized official.

unications for served agencies (except for MARS).

ls, have liaison stations on hand to receive traffic on the local net ou should also be sure that there is a representative on each eceive traffic going to the local area.

sion (or substantial segment of a session) of the local net on epeater is on emergency power, allow only emergency-powered repeater for a certain time period.

y is a critique session to discuss the test results. All ARES (and vited to the meeting to review good points and weaknesses ways to improve procedures, techniques, and coordination with ur group's effort using the appropriate forms and include any ns of interest.

an emergency situation is to tie together all of the various local s by which all traffic destined outside of a local area, section or ayed to the addressee.

e followed. A valid exception is the handling of emergency traffic lly and efficiently as possible, bypassing various levels of nets Another exception is when one station is loaded down with traffic discretion of the Net Control Station (NCS), the station may be nnel and go directly to a lower (or higher) echelon net. And ARES lies in the liaison function between local nets and other tion level. Responsibility for representation of the local network ocal net manager who may or may not be the EC. Although we being the representatives in section nets, it is equally valid to liaison to local nets.

substantial segment of a session should be conducted on se session or two. Advise the NCS just before net time. If NCS cy power, then someone else must be net control. Only stations may report in during this time.

ay to a successful SET is to try to get as many people involved hams. In a real emergency, we find amateurs with all sorts of ie woodwork. Let's get them involved in SET so they will know mmunications should be handled. Promote SET on nets and usiastic Technicians—there are tons of them ripe for picking. ill be inexperienced in public-service activities. It's up to you to and provide them with useful roles. They may like it so much that ure in your ARES or NTS group. For a review of last year's oy Test, read the article in July *QST*.

VRC Meets in St. Louis; Considers Field Issues

The Volunteer Resources Committee is the standing committee of the Board of Directors that serves to advise the Board, and staff on issues involving ARRL volunteer-based programs including the Field Organization, National Traffic System, Amateur Auxiliary, and Amateur Radio Emergency Service. The committee met in St. Louis on April 23, 1994, and considered and acted on a number of important issues facing the ARRL field.

Possible Agreement With REACT

The committee considered a staff report and proposal received from REACT International for a possible Memorandum of Understanding between REACT and ARRL. Members detected no changes since policy was set by the Board ten years ago, so the committee declined to pursue an MOU with REACT at this time.

"Jump Teams"

Following a review of a staff report and recommendations on the issue of integrating the "jump team" concept within the existing ARES framework, the committee recommended that the program as outlined be incorporated as a set of guidelines to be published in ARES literature. The committee supported the concept of adjacent section co-operation as the primary means of implementing the program.

National Disaster Medical System

The committee reviewed an extensive staff report on the issue of a possible MOU with the National Disaster Medical System (NDMS). It was noted that there is a general lack of interest in the field for the program, and that it would be premature to pursue a national-level MOU at this time. Accordingly, the committee set aside further action on this issue until such time as more Field Organization NDMS-related activity is detected.

National Volunteer Organizations Active in Disaster

The committee reviewed an extensive staff report on the League's membership in the National Volunteer Organizations Active in Disaster (NVOAD). The report provided a history of the League's involvement with the organization, and set forth recommendations concerning future involvement. After discussion, the committee recommended that ARRL continue its membership for another year, while monitoring the activities of NVOAD more closely. Another evaluation will be conducted next year.

Technical Achievement Awards

In response to Minute 41 of the 1994 Annual Meeting, the committee reviewed a staff report and recommendations regarding the feasibility of a system of technical awards and development of a set of criteria. Following discussion, the committee requested that the staff-drafted Terms of Reference be reformatted and then sent back to the Future Systems Committee and Long Range Planning Committee for review and approval.

Electronic Filing of Field Appointments

In response to a Board action, the committee addressed the subject of electronic filing of Field Organization appointments with the Field Services Department.

Field Services Manager Rick Palm reported that a new policy had just been established which eliminated the need for Section Managers to file the FSD-211 appointment card with HQ. Now, the department will accept new appointments in any form. This policy was instituted to relieve the administrative burden placed on Section Managers by the appointment process. The committee approved of the new policy, and asked that it be promulgated through publication in the Field Organization newsletters.

Amateur Radio Good Samaritan Law

The committee considered the possibility of pursuing

the development of "Amateur Radio Good Samaritan Laws" at the state level. Based on an opinion from ARRL General Counsel Chris Imlay, N3AKD, the committee concluded that the idea was meritorious, and might be pursued. Staff was asked to obtain from General Counsel Imlay a list of states which presently have basic good samaritan laws. The pursuit of new laws might be coordinated by State Government Liaisons with assistance (in the form of sample laws and draft language) from staff and General Counsel Imlay. The committee also asked that the full Board be heard on this issue prior to any effort being instituted in the field.



Emergency Coordinators From The Hurricane Watch Net

March 29, 1994

Mr. Rick Palm, K1CE
Manager, Field Services
American Radio Relay League
225 Main Street
Newington, CT 06111

Dear Rick:

It was a pleasure to meet you and have the brief chance to chat during the ARRL Maryland Convention in Baltimore. I only wish we had more time to discuss the subject of public service and emergency communications with the small group that was assembled.

Again thank you for your kind remarks concerning the Hurricane Watch Net. While we have been accused of being too strict in our membership requirements and on the air operations, we find that type of operation is required during time of disaster.

I took over about a year ago as president and net manager from Don, KO1ND who remains an active member of the net. Don had been running the net for the past 25 or so years and just felt that it was time for a change. Layton Ruse, W4VBQ, still manages the operation of the station at the National Hurricane Center.

Since taking over the net, my goals have been to continue to enhance the very fine working relationship that we have with the National Hurricane Center, to develop our net members through training programs and to coordinate our operation with local ARES/RACES and SKYWARN operations. I think the coordination effort is the most important action that we can take at this time. In the past, I think that there was a concern that the Hurricane Watch Net was trying to control local amateur operations by being the "authority" on hurricane operations. Reading some of the past correspondence that has taken place between the net and local amateurs, there may have been some basis for this concern. Let me assure you that I see the Hurricane Watch Net as a resource to support local operations. In fact, without effective local operations, our mission of dissemination advisories and collecting weather reports falls apart. In this day of CNN and the Weather Channel we

need the local input much more than they need us. I would very much like to hear from section and local emergency coordinators as to how we can better support them. I would also like to coordinate our efforts to be sure that we are talking to the right people when a storm hits.

If space permits, perhaps a request in *Field Forum* or one of the other publications to have emergency coordinators contact me with their ideas as to how we can help them and how we can coordinate our efforts would be appropriate.

Rick, I consider the Hurricane Watch Net to be a partner with the League on the national and local level when it comes to communications during hurricanes. If there is anything that the net can do to assist you please feel free to contact me.

Looking forward to working with you.

Sincerely,

Jerry R. Herman, N3BDW
Net Manager

Southern Florida ARES, State of Florida Meet to Develop New Partnership

Lake Placid, Florida, March 26, 1994—When Hurricane "Andrew" slammed into the Dade County coastline on August 24, 1992, no one was ready for the devastation that would follow. Months after the storm's landfall, a blue ribbon report to Governor Lawton Chiles made more than 80 recommendations for improved response to the next disaster to strike the state. One of those recommendations was a stronger support of Amateur Radio before disaster strikes!

Some seven months after "Andrew," new leadership with a new direction arrived at the State Division of Emergency Management (DEM) in Tallahassee. Since then, the State and the ARES organizations in both the Southern and Northern ARRL Sections of Florida have been working to develop a strong working relationship in preparation for the next "big one."

Part of that team building effort has included meetings



DONN BROWN, WB8RAZ

SM Dick Hill, WA4PKF, r, presents certificate to Jim Goldsberry, KD4GR, for developing CAT teams, while Gary Arnold, WB2WPA, awaits receipt of his certificate for developing section-wide SET for October 1993.



DONN BROWN, WB8RAZ

Hill presents certificate of merit to Jerry Eichorn, WB4WDK, for four years as Assistant SEC.

between State EOC personnel and ARES and RACES leadership in both sections. Following a meeting with NFL leaders in January, the State sponsored a meeting with SFL representatives at a day long workshop in Lake Placid, Florida. Representatives of twenty-two of the twenty-three counties in SFL were present, and the State promised to increase its support for, and involvement with Amateur Radio.

Speaking for the State, DEM Community Program Administrator John Fleming, WD4FFX said the State is concerned that RACES rules in Part 97 haven't been updated since the early days of the "cold war," and are badly outdated. Fleming said that before accepting the job in Florida, he had been concerned that the amateur radio community would require a major overhaul to develop a cohesive, well-planned organization. To his surprise he said he found both sections had well-developed organizations and exercised plans in place, which have only improved since "Andrew."

(continued on page 8)

Midwest Floods Follow-Up

To The Editor:

Your article in the Field Forum of April 1994 may need some updating. I nominated two individuals for this award. One of the individuals was a ham operator, Steve Vögt, NØJML. Steve, a private businessman, assisted as a ham operator during the flood by donating equipment.

We had three separate floods in Jefferson County (we have the Mississippi on the East, the Meramec on the North and the Big River goes through the Western side and runs North). Due to an eight inch rainfall, the Big River caused a flash flood at our southern boundary in September and again eight weeks later in November. There were over 200 water rescues, plus nine children and a school bus driver (because of this, the amateurs in the two adjoining southern counties now work as a team with us). During the flooding months of 1993, I utilized sixty hams in Jefferson County.

St. Charles County, to our north, has 82 hams as volunteers in their Emergency Management program. When they were exhausted, they called for assistance and amateurs from St. Louis City and County responded. We of Jefferson County and St. Charles County could not have made it through the flood without the assistance of the Amateur Radio Operators.

We just recently had a conference of the Missouri Emergency Preparedness Association (MEPA) at which time we found out that approximately one-third of the directors of the various counties were ham operators. In addition, we amateurs in the Emergency Management field will be getting together on a regular basis to see how we can use our amateur resources more effectively in future disasters in Missouri.

I'm sure that if the directors of the affected counties of Missouri would write to the ARRL and tell of the work of the amateurs during the flood, the amateurs of the world would be proud. I know that I'm damn proud of the amateurs in Jefferson County, Missouri, and the hours of work that they contributed. Perhaps someday, 100% of the Emergency Management Directors will be amateurs and the local officials will not have to wonder what amateurs are or what they can do.

73's

Fred Bauman, KGØJ
EMA Director

(continued from page 7)

SFL SM Dick Hill, WA4PKF presented ARRL Certificates of Merit to the three Assistant SECs for the section. Jerry Eichorn, WB4WDK was honored for four years of service in that position, which ends with his retirement in April. Jim Goldsberry, KD4GR was recognized for his work in developing the "Communications Assistance Teams" (CAT) for emergency mutual aid. Gary Arnold, WB2WPA was cited for developing the section wide Simulated Emergency Test last October, which heavily exercised the new "CAT" plan.

SEC Manny Papandreas, W4SS reviewed the updated SFL ARES plan. Southeastern Division Assistant Director and "CAT" plan coordinator Joel Kandel, KI4T walked the group through the "CAT" plan, highlighting some minor revisions that came from the SET. KD4GR reviewed the "CAT" concept and registration process, and the need for testing, and WB2WPA gave a final SET review and critique. SFL STM Bill Jochimsen, K4ZK gave an overview of NTS operation in the state, and the meeting adjourned following a question and answer session.

There were only positive comments from the 62 ECs, AECs, Red Cross and Health and Rehabilitative Services representatives who attended the meeting. The State reinforced the spirit of cooperation and support in the session's final activity, when paperwork was completed for State mileage reimbursement for those who drove to the meeting ... and an announcement that DEM had also picked up the check for lunch!

FIELD FORUM
published by the
American Radio Relay League
225 Main Street
Newington, CT 06111, USA
George S. Wilson III, W4OYI
President
David Sumner, K1ZZ
Executive Vice President
Richard K. Palm, K1CE
Editor
Jodi Morin, KA1JPA, Compositor

The purposes of *ARRL FIELD FORUM* are to: (1) provide a forum for exchanging ideas, problems and solutions among members of the ARRL Field Organization and affiliated clubs and registered instructors; (2) provide information to assist appointees and clubs in performing their roles in the field; and (3) promote a harmonious working relationship among appointees, affiliated clubs, section leaders and Headquarters staff.

Material may be quoted without prior permission provided *ARRL FIELD FORUM* is credited.



AMERICAN RADIO RELAY LEAGUE
225 MAIN STREET
NEWINGTON, CT 06111

Non-Profit Org.
US Postage
PAID
Hartford, CT
Permit No. 2929

HQ-FSD-FF SW SB 0000 CLUB
004002756 061694 FO
Calif Polytechnic State W6BHZ
Cal Eustaquio N6KYR
UU Box 53
Cal Poly State University
San Luis Obispo CA 93407



The ARRL Web Extra for Members Only

ARDF Team USA Competes in Europe: "Nobody Finished Last!"

ARRL Web Extra
NEWS ITEMS
FEATURES
ARCHIVE
SEARCH

ARRL Web
NEWS
INFO & SERVICES
PRODUCTS
JOIN / RENEW
SITE INDEX
SEARCH
HOME
MEMBER HOME

[Text-only page](#)

NEWINGTON, CT, Sep 24, 1998--Amateur Radio Direction Finding Team USA, led by Dale Hunt, WB6BYU, returned to a warm welcome from the Ninth ARDF World Championships in Nyiregyhaza, Hungary, the first week of September. This marked the first time that the US and the ARRL were represented at the world championship of foxhunting.

"This was a great ham event!" Hunt said. "The people were quite friendly and glad finally to have representatives from Region II."

Hunt said the US contingent got a lot of advice on equipment and strategy from members of the other teams. "I will be getting another bunch of schematics shortly, and it may be possible to acquire some equipment from some of the Europeans who are building it," he said. Separate events were held on both HF (80 meters) and VHF (2 meters).

Hunt described one late-night session where Tchermen Goulev, UA3BL, helped him repair and realign his 80-meter receiver, which Goulev deemed not sensitive enough. "He went out the next day and won the gold," Hunt said, adding that his own receiver "worked well enough."

Some 250 competitors from 32 countries turned out for the event in Eastern Hungary. Hunt said the terrain was pretty flat and sandy, "mostly woodlots with an occasional cornfield or pasture."

Course lengths averaged 8 km (5 miles). "The 2-meter competition was fairly straightforward, as the transmitters were in somewhat of a circle," he explained. "On the 80-meter course, they were in more of a diamond with the start and finish at opposite corners, making it a more difficult decision to choose the optimum order." Hunt said the best times were around 45 to 50 minutes. The time limit was 130 minutes (2 hours, 10 minutes.)



Team USA Captain Dale Hunt, WB6BYU, takes a break at a foxhunting exercise in Hacienda Heights, California August 1. [Photos courtesy of Joe Moell, K0OV]

"For a relatively inexperienced team, we did relatively well," Hunt said. "Nobody was disqualified or came in last in their category--though it was a real squeaker on the 80-meter hunt!" Hunt said that almost every other country "could claim they had beat our team in some category." A big plus for the team's 80-meter efforts came from Gyuri Nagy, HA3PA, a native of Hungary who has won medals in prior ARDF World Championships. Nagy, a resident alien in the US, offered welcome assistance by providing additional 80-meter ARDF equipment for use by Team USA team during the Championships. The American team had done most of its foxhunting on 2 meters.

Future opportunities exist for international competition. "We have invitations to send a visiting team to the Region I championships next year in Croatia, to the French national championships, and to the Region III championships in Korea," Hunt said. "And for those who want to plan ahead, the next World Championships will be held in 2000 in China. See you there!"

Although Team USA didn't take home any medals, Hunt took a positive approach. "Team USA found all but one of its 34 aggregate hidden fox transmitters," he said. "Each US competitor got to the finish line within the allotted time to avoid disqualification in both events."

ARRL ARDF Coordinator Joe Moell, K0OV, has more information on the event on a special page at <http://members.aol.com/homingin/>. "It includes a link to the complete results of the 80 meter and 2-meter events," he said. He hopes to add photos from the event soon. Contact Moell via e-mail at homingin@aol.com.

[Adapted from information provided by ARRL ARDF Coordinator Joe Moell, K0OV]



Team USA member Marvin Johnston, KE6HTS, attempts to zero in on the target at the August 1 California foxhunt.

ARRL Web Extra
NEWS ITEMS
FEATURES
ARCHIVE
SEARCH

The ARRL ARDF Team USA (in alphabetical order by name):

- Dale Hunt, WB6BYU, Old Timer Division (Team Captain)
- Barbara Johnston, KE6OTF, observer and photographer
- Marvin Johnston, KE6HTS, Old Timer Division
- Jack Loflin, KC7CGK, Junior Division
- Gyuri Nagy, HA3PA, Senior Division
- Dennis Schwendtner, WB6OBB, Team Trainer



R & S SURPLUS
1050 E. CYPRESS STREET
COVINA, CALIFORNIA 91724



Shafer
Engineering

15858 Business Center Dr. (818) 960-5402
Irwindale, CA 91706 Fax (818) 960-5405

80654

CALIBRATION REPORT

CUSTOMER

R&S SURPLUS

			DATE RECEIVED		CUST. P.O. NO.
			19 MAY 92		
ASSET NO. ---	MANUFACTURER HEWLETT PACKARD	MODEL 86602A/8660C	DESCRIPTION RF SECTION/GENERATOR	SERIAL NO. 1243A00201/2406A04909	
TEMP. 23° C	HUMIDITY 41%	ACCURACY MFG	PRIOR CAL. ---	CALIB. FREQUENCY 6 MONTHS	DATE OF TEST 26 MAY 92
NEXT TEST DUE 26 NOV 92					

CUSTOMER ACCESSORIES RECEIVED WITH UNIT

WORK REQUESTED

- ESTIMATE
- REPAIR
- CALIBRATE

CONDITION AS RECEIVED:

PHYSICAL:

- GOOD CONDITION
- POOR CONDITION
- MISHANDLING
- OVERLOAD/MISUSE
- AGE AND LONG SERVICE

FUNCTIONAL:

- WITHIN TOLERANCE
- OUT OF TOLERANCE
- REPAIR REQUIRED

NOTE: WHAT AREA WAS OUT
OF TOLERANCE

CALIBRATION EQUIPMENT						PARTS		
MANUFACTURER	MODEL	SERIAL	ACCURACY	DATE CALIBRATED	RECALL DATE	QTY.	DESCRIPTION	CKT SYMBOL
SPECTRACOM	8161-16	8161-0799	WWVB	15 JUL 91	15 JUL 92			
HP	8640B	2350A23512	MFG	24 OCT 91	24 JUL 92			
EIP	928	00192	MFG	03 DEC 91	03 JUN 92			
EIP	548A	00789	MFG	08 MAY 92	08 NOV 92			
HP	435A	1949A10079	MFG	03 FEB 92	03 AUG 92			
HP	8485A	2632A04205	MFG	05 DEC 91	05 DEC 92			
TEK	547	008520	2%	24 JAN 92	24 JUL 92			
TEK	1A1	20565	3%	23 JAN 92	23 JUL 92			
KEITHLEY	179	134871	MFG	06 DEC 91	06 JUN 92			

CHECKED FOR PROPER OPERATION AND CALIBRATED PER REQUIREMENTS OF MIL-STD-45662 A

<input checked="" type="checkbox"/> CLEANED	<input type="checkbox"/> REPAIRED	<input checked="" type="checkbox"/> CALIBRATION CHECKED TO	MFG	SPECIFICATIONS
	<input type="checkbox"/> MODIFIED	<input type="checkbox"/> ADJUSTED TO	MFG	SPECIFICATIONS
PROCEDURE USED			MFG	
TECHNICIAN LM	NBS TEST NO. 239582-246136-209690-240585-248836-244942-245527-248413-WWVB			

SHAFER ENGINEERING CERTIFIES THAT ALL CALIBRATION EQUIPMENT USED IN THE TEST IS DIRECTLY TRACEABLE TO THE N.I.S.T. AND THAT ALL MATERIALS USED ARE EQUAL TO OR SUPERIOR TO ORIGINAL MANUFACTURER'S. CALIBRATED TO THE 1990 VOLT AND OHM.

ANY READINGS OR CALIBRATION DATA INCLUDED WITH THIS CALIBRATION REPORT WAS RECORDED AT THE TIME OF MEASUREMENT AND SHALL NOT IMPLY ANYTHING ABOUT FUTURE STABILITY. THIS MUST BE DETERMINED FROM PREVIOUS HISTORICAL DATA.

Howard Shafer
GENERAL MANAGER

OWNERSHIP INFORMATION

Name (202) Cal Poly Amateur Radio Club

Address (203) U.U. Box 53

City (204) San Luis Obispo State (205) Ca Zip Code (206) 93407

Age (176) _____ Sex (177) _____ Occupation (178) _____

Education

(179) Grade 1-6

(183) University

Annual Income

(180) Grade 7-12

(184) Graduate School

(186) Less than \$25,000

(189) \$75,000 to \$99,000

(181) Jr. College

(185) Post Graduate

(187) \$25,000 to \$49,999

(190) Over \$100,000

(182) Other (Specify) _____

Call Sign (191) W6BHZ License Class (192) Adv. Year First Licensed (193) 1948

PRODUCT REGISTRATION

FT-990

Model Number (194) _____ Serial Number (195) 2G150205

Date Purchased (196) 6/3/93

Dealer Name (197) Oklahoma Comm Center

Address (198) 3900 South Broadway, Suite 6

City (199) Edmond State (200) OK Zip Code (201) 73013

Fold Here

Cal Poly Amateur Radio Club
U.U. Box 53
San Luis Obispo, Ca 93407

Place
Stamp
Here

YAESU U.S.A.

17210 Edwards Road
Cerritos, CA 90701

Attn: Warranty Registration

Tape
Do Not Staple

C O N S U M E R P R O F I L E D A T A

So that we can better serve your needs in the future, please complete the profile data below. Thank you.

1. How was this product purchased?

(01) In-store
 (02) Mail Order

(03) Hamfest (Specify _____)
 (04) Other (Specify _____)

2. Why did you purchase this product?

(05) Price
 (07) Features
 (Specify _____)
 (09) Brand Name

(06) Design
 (08) Reputation

3. Influences to purchase this product?

(10) Recommendation from another ham
 (11) Magazine Product Review
 (12) Salesman

(13) Advertising
 (14) Other (Specify _____)

4. Amateur Radio Magazines you read: (Check all that apply)

(15) QST
 (16) CQ
 (17) 73
 (18) SpCQ
 (19) Sp. Radioscan
 (24) Other (Specify _____)

(20) Popular Communications
 (21) Monitoring Times
 (22) Worldradio
 (23) Radioscan

5. Primary Interests (Check all that apply) (Use "1" for Interested, "2" for Using)

	SSB	CW	FM	AM	RTTY	PACKET	ATV
1-30 Mhz	(25) <u>2</u>	(26) <u>2</u>	(27) _____	(28) _____	(29) _____	(30) _____	(31) _____
50 Mhz	(32) _____	(33) _____	(34) _____	(35) _____	(36) _____	(37) _____	(38) _____
144 Mhz	(39) _____	(40) _____	(41) <u>2</u>	(42) _____	(43) _____	(44) <u>2</u>	(45) _____
220 Mhz	(46) _____	(47) _____	(48) _____	(49) _____	(50) _____	(51) _____	(52) _____
440 Mhz	(53) _____	(54) _____	(55) <u>2</u>	(56) _____	(57) _____	(58) _____	(59) _____
1.2 Ghz	(60) _____	(61) _____	(62) _____	(63) _____	(64) _____	(65) _____	(66) _____

6. Primary Frequencies used (Check all that apply)

	BASE	MOBILE	HANDHELD
1-30 Mhz	(67) <u>X</u>	(68) <u>X</u>	(69) _____
50 Mhz	(70) _____	(71) _____	(72) _____
144 Mhz	(73) <u>X</u>	(74) <u>X</u>	(75) <u>X</u>
220 Mhz	(76) _____	(77) _____	(78) _____
440 Mhz	(79) <u>X</u>	(80) <u>X</u>	(81) <u>X</u>
1.2 Ghz	(82) _____	(83) _____	(84) _____
DUAL-BAND			
144/220 Mhz	(85) _____	(86) _____	(87) _____
144/440 Mhz	(88) _____	(89) <u>X</u>	(90) <u>X</u>
TRI-BAND			
144/220/1.2 Ghz	(91) _____	(92) _____	(93) _____
144/440/1.2 Ghz	(94) _____	(95) _____	(96) _____

7. Planned Purchases in the next 12/24 Months

	HF	M	H	\$250	\$500	\$700	\$1000 +
1-30 Mhz	(97) _____	(98) _____	(99) _____	(100) _____	(101) _____	(102) _____	(103) _____
50 Mhz	(104) _____	(105) _____	(106) _____	(107) _____	(108) _____	(109) _____	(110) _____
144 Mhz	(111) _____	(112) _____	(113) _____	(114) _____	(115) _____	(116) _____	(117) _____
220 Mhz	(118) _____	(119) _____	(120) _____	(121) _____	(122) _____	(123) _____	(124) _____
440 Mhz	(125) _____	(126) _____	(127) _____	(128) _____	(129) _____	(130) _____	(131) _____
1.2 Ghz	(132) _____	(133) _____	(134) _____	(135) _____	(136) _____	(137) _____	(138) _____
Dual-Band	(139) _____	(140) _____	(141) _____	(142) _____	(143) _____	(144) _____	(145) _____
Tri-Band	(146) _____	(147) _____	(148) _____	(149) _____	(150) _____	(151) _____	(152) _____

8. Equipment you currently own:

	Brand	Age
<input type="checkbox"/> Receiver	(153) _____	(154) _____
<input type="checkbox"/> Transmitter	(155) _____	(156) _____
<input type="checkbox"/> VHF/UHF Handheld	(157) _____	(158) _____
<input checked="" type="checkbox"/> VHF/UHF Transceiver	(159) <u>Kenwood</u>	(160) <u>7</u>
<input type="checkbox"/> HF Transceiver	(161) _____	(162) <u>8</u>
<input type="checkbox"/> Beam Antenna	(163) _____	(164) _____
<input type="checkbox"/> Antenna Rotator	(165) _____	(166) _____
<input checked="" type="checkbox"/> RF Power Amplifier	(167) <u>Drake</u>	(168) <u>15</u>
<input checked="" type="checkbox"/> Computer	(169) <u>IBM</u>	(170) <u>6</u>
<input checked="" type="checkbox"/> Mobile Rig	(171) <u>Kenwood</u>	(172) <u>6</u>
<input type="checkbox"/> Other	(173) _____	(174) _____

Cal Poly Amateur Radio Club Members 98-99

Call	Name	Status	Home Phone	Work Phone	Pager	E-Mail Address
KC6QOQ	Johnathan Becker	President	805 756 8325			jimbecker@joule.ee.calpoly.edu
KF6PKW	Burnt Christian	Member	805 545 0708		805 541 7808	burnt@latexnet.org
	Sean Conklin	Member	805 756 8298			sconklin@calpoly.edu
W6RKA	Richard Dickey	Emeritus	805 543 2991			rdickey@gauss.ee.calpoly.edu
N6UEZ	Dave Evans	Associate	805 781 0558	805 756 6435		daevans@w6bhz.calpoly.edu
N6NL	Rick Gilligan	Trustee	805 544 6659	805 544 5822	Contact Rick	rick@case.net
KE6MNQ	Neal Hadsell	Expired	805 547 6360	805 594 3517		nhadsell@w6bhz.calpoly.edu
	Matt Haggard	Expired	805 528 8701	805 547 5626		mhaggard@callamer.com
KF6IVH	Dawn Halterman	Associate				dawn@w6bhz.calpoly.edu
KQ6XL	Tim Hauerter	Associate	805 438 5045			kq6xl@aol.com
KF6DMI	Josh Hill	Comp Mgr	805 546 0523	805 783 0810		jehill@w6bhz.calpoly.edu
N6BDE	Brad Horak	Lifetime	650 851 2311	650 853 2285	contact Brad	horak@pa.dec.com
KE6MQQ	Paul Jensen	Member	805 545 5915			pjensen@w6bhz.calpoly.edu
KE6KOT	Russ Jensen	Expired	805 544 3218	805 473 6883		russjh@juno.com
N6TQL	Len Kawamoto	Expired	805 543 7883	805 541 3000	805 784 3820	lkawamot@galaxy.csc.calpoly.edu
KD6EKM	Aaron Klohs	Expired	805 528 8701	805 541 6666	805 594 3639	x7412 Num Aaron Klohs@w6bhz.calpoly.edu
KD6CVS	Speed Leska	Member	805 543 2047	805 547 8530	805 541 7838	mleska@w6bhz.calpoly.edu
KC6NXB	Hannah Lewbel	Rptr Mgr	805 756 4697			sappirus@hotmail.com
KC6WOT	Dan Malone	Advisor	805 481 4132	805 756 6326	805 547 6326 Alpha	dmalone@w6bhz.calpoly.edu
KD6HPC	Ryan Matteson	Associate	805 781 9336	805 756 7676		rpm@w6bhz.calpoly.edu
KF6PKT	Chris Mc Ilroy	Secretary	805 541 3441		805 545 7006	cmcilroy@polymail.cpunix.calpoly.edu
KQ6BX	Gary McCrillis	Vend Mgr	805 543 7883			gmccrill@galaxy.csc.calpoly.edu
KD4KMB	Les Miller	Associate	805 544 0646			lesmgm@thegrid.net
KE6SYA	Tami Minturn	Treasurer	805 784 9201	805 542 9988	805 547 6772	tminturn@w6bhz.calpoly.edu
KF6PKV	Keith Mosher	Expired				
KE6OMS	Dave Oksner	Stn Mgr	805 781 9569	805 544 5822	Contact Dave	doksnr@nexis.org
KD6HPD	Ryan Poling	Associate	805 544 5197			jpoling@w6bhz.calpoly.edu
KF6SXW	Matt Reistetter	Member	805 541 8570			mreistet@polymail.calpoly.edu
KK6DJ	John Rogers	Associate	805 594 3470	805 545 5416		jrogers@abetterbeep.com
	Keet Rom	CouncilRep	805 756 8594			crom@calpoly.edu
WA6MVP	Doren Rosenthal	Associate	805 541 0910			doren@slonet.org
	Chris Ruiz	Expired	805 756 8241			cruiz@polymail.calpoly.edu
KD6RCT	Kirk Smith	Associate	805 784 2694		contact Kirk	kjsmith@fix.net
KD6JTS	Mark Smith	Vice Pres	805 544 FISH	805 781 6301		mark@halibut.com
KC6WRD	Steve Smith	Lifetime	805 544 3397			kc6wrd@calwest.net
KF6PKU	Dave Spencer	Associate	805 544 3743	805 783 0400 x2280	805 594 2369	dspencer@w6bhz.calpoly.edu
KF6HCZ	John Stockton	Member	805 756 8752			istockto@calpoly.edu
KF6NWK	Chad Tindel	Expired	805 543 7883		805 784 2544	ctindel@galaxy.csc.calpoly.edu
KF6PLC	Sean Vahey	Associate				
KF6PKZ	Terry Vahey	Associate				





CAUTION — KEEP THIS
SHEET WITH TUBE UNTIL
INSTALLED IN EQUIPMENT

OPERATING HAZARDS READ THIS SHEET AND TAKE ALL SAFETY PRECAUTIONS

PROPER USE AND SAFE OPERATING PRACTICES WITH RESPECT TO POWER TUBES ARE THE RESPONSIBILITY OF EQUIPMENT MANUFACTURERS WHO INCORPORATE THE TUBE INTO EQUIPMENT AND USERS OF SUCH TUBES AND EQUIPMENT. THE SUPPLIER OF THIS POWER TUBE PROVIDES INFORMATION ON ITS PRODUCTS AND ASSOCIATED HAZARDS, BUT IT ASSUMES NO RESPONSIBILITY FOR AFTER-SALE OPERATING AND SAFETY PRACTICES. LIMITED LIFE AND RANDOM FAILURES ARE INHERENT CHARACTERISTICS OF ELECTRON TUBES. TAKE APPROPRIATE ACTION THROUGH REDUNDANCY OR OTHER SAFEGUARDS TO PROTECT PERSONNEL AND PROPERTY FROM TUBE FAILURE.

ALL PERSONS WHO WORK WITH OR ARE EXPOSED TO POWER TUBES OR EQUIPMENT WHICH UTILIZES SUCH TUBES MUST TAKE PRECAUTIONS TO PROTECT THEMSELVES AGAINST POSSIBLE SERIOUS BODILY INJURY. DO NOT BE CARELESS AROUND SUCH PRODUCTS.

OPERATING INSTRUCTIONS

This Operating Hazards Sheet, any packing and unpacking instructions, installation instructions, operating instructions, and relevant test data which may be included with this Power Tube can help you to operate this tube safely and efficiently. READ THEM. The Technical Data Sheet for this power tube provides operating specifications for individual products and other application information. Uninformed or careless operation of this tube can result in poor performance, damage to the tube or property, serious bodily injury, and possibly death.

Questions regarding tube operation or safety matters should be addressed to the Applications Engineering Department.

WARNING—SERIOUS HAZARDS EXIST IN THE OPERATION OF POWER TUBES

The operation of power tubes involves one or more of the following hazards, any one of which, in the absence of safe operating practices and precautions, could result in serious harm to personnel:

- a. HIGH VOLTAGE—Normal operating voltages can be deadly. See below for additional information.
- b. RF RADIATION—Exposure to RF radiation may cause serious bodily injury possibly resulting in blindness or death. **Cardiac pacemakers may be affected.** See below for additional information.
- c. X-RAY RADIATION—High voltage tubes can produce dangerous, possibly fatal X-rays. See below for additional information.
- d. BERYLLIUM-OXIDE POISONING—Dust or fumes from BeO ceramics used as thermal links with some conduction cooled power tubes are highly toxic and can cause serious injury or death. See below for additional information.
- e. GLASS EXPLOSION—Many electron tubes have glass envelopes. Breaking the glass can cause an implosion, which will result in an explosive scattering of glass particles. Handle glass tubes carefully. See below for additional information.
- f. HOT WATER—Water used to cool tubes reaches scalding temperatures. Touching or rupture of the cooling system can cause serious burns. See below for additional information.
- g. HOT SURFACES—Surfaces of air-cooled radiators and other parts of tubes can reach temperatures of several hundred degrees centigrade and cause serious burns if touched. See below for additional information.

Additional specific information about power tube hazards:

HIGH VOLTAGE

Many power tubes operate at voltages high enough to kill through electrical shock. Design equipment utilizing these tubes to prevent personnel contact with high voltages. Securely attach prominent hazard warnings. Personnel should always break the primary circuits of the power supply and discharge high voltage capacitors when direct access to the tube is required.

RADIO FREQUENCY RADIATION

EXPOSURE OF PERSONNEL TO RF RADIATION SHOULD BE MINIMIZED. PERSONNEL SHOULD NOT BE PERMITTED IN THE VICINITY OF OPEN ENERGIZED RF GENERATING CIRCUITS, OR RF TRANSMISSION SYSTEMS (WAVEGUIDES, CABLES, CONNECTORS, ETC.), OR ENERGIZED ANTENNAS. It is generally accepted that exposure to "high levels" of rf radiation can result in severe bodily injury including blindness. **Cardiac pacemakers may be affected.**

The effect of prolonged exposure to "low level" rf radiation continues to be a subject of investigation and controversy. While there continues to be support for lower limits, it is generally agreed among official standard-setting groups in the U.S. that prolonged exposure of personnel to rf radiation at frequencies of 10 MHz-100 GHz should be limited to average power densities of ten milliwatts per square centimeter (10 mW/cm^2) or lower, using any possible one tenth of an hour (.1 hour)

as the averaging period. It is also generally agreed that exposure should be reduced in working areas where personnel heat load is above normal. The 10 mW/cm^2 average level has been adopted by several U.S. Government agencies including the Occupational Safety and Health Administration (OSHA) as the standard or protection guide for employee work places.

Rf energy must be contained properly by shielding and transmission lines. ALL INPUT AND OUTPUT RF CONNECTIONS, SUCH AS CABLES, FLANGES AND GAS-KETS MUST BE RF LEAKPROOF. NEVER OPERATE A POWER TUBE WITHOUT A PROPERLY MATCHED RF ENERGY ABSORBING LOAD ATTACHED. NEVER LOOK INTO OR EXPOSE ANY PART OF THE BODY TO AN ANTENNA OR OPEN RF GENERATING TUBE OR CIRCUIT OR RF TRANSMISSION SYSTEM WHILE IT IS ENERGIZED. MONITOR THE TUBE AND RF SYSTEM FOR RF RADIATION LEAKAGE AT REGULAR INTERVALS AND AFTER SERVICING.

X-RAY RADIATION

As operating voltages increase beyond 15 kilovolts, power tubes are capable of producing progressively more dangerous X-ray radiation. Dangerous X-ray radiation is more likely from high-power transmitting tubes, many pulse-modulator tubes, high-vacuum rectifier tubes, and all older high voltage tubes that may have undergone changes in emission characteristics with aging and gradual deterioration. Provide adequate X-ray shielding on all sides of these tubes, particularly around the anode as well as the modulator and pulse transformer where these are used. Check X-ray levels. NEVER OPERATE HIGH VOLTAGE TUBES WITHOUT ADEQUATE X-RAY SHIELDING IN PLACE. MONITOR THE TUBE AFTER SERVICING AND AT REGULAR INTERVALS FOR POSSIBLE CHANGES IN X-RAY LEVELS DUE TO AGING.

DANGER:

BERYLLIUM OXIDE CERAMICS (BeO) - AVOID BREATHING DUST OR FUMES

BeO ceramic material is used as a thermal link to carry heat from the tube to a heat sink in a number of conduction cooled power tubes. The BeO thermal link may be brazed to the anode section of the power tube, or may be a separate accessory. Do not perform any operation on any BeO ceramic which might produce dust or fumes, such as grinding, grit blasting, and acid cleaning. BERYLLIUM OXIDE DUST OR FUMES ARE HIGHLY TOXIC AND BREATHING THEM CAN RESULT IN SERIOUS PERSONAL INJURY OR DEATH. Because BeO warning labels may become obliterated or removed, you are urged to contact your tube supplier before performing any work which might affect any external thermal link on any conduction-cooled power tube.

When BeO ceramics are to be salvaged or disposed of, special precautions must be taken to protect personnel. All such personnel must be made aware of the deadly hazards involved and the necessity of great care and attention to safety precautions. Any tube with a BeO thermal link, or any separate BeO thermal link will be disposed of without charge, provided it is returned freight prepaid to the supplier from which it was purchased with a written request for disposal. The supplier will then return it to the manufacturer for proper disposal.

GLASS EXPLOSION

Every power tube is pumped to a very high vacuum, which, in some cases, is contained by a glass envelope. When handling glass tubes, remember that glass is a relatively fragile material, and accidental breakage can result at any time. Breakage can cause an implosion, which will result in an explosive scattering of flying glass particles and fragments. Serious personal injury can result. The larger the tube envelope, the greater the potential hazard. When handling such tubes, safety glasses (or even better, a face shield), heavy clothing and leather gloves should be worn for protection.

HOT WATER

EXTREME HEAT occurs in the anode portion of power tubes during operation. Water channels used for cooling also reach high temperatures (as high as boiling, 100°C or 212°F . or above) and the hot water is under pressure (sometimes as high as 100 PSI). A rupture of the water channel or other contact with hot portions of this tube could scald or burn. Take precautions to prevent and avoid such rupture or contact.

HOT SURFACES

The anode portion of power tubes is often air-cooled or conduction-cooled. The air-cooled external surface normally operates at a high temperature (up to 200° to 300°C). Other portions of the tube may also reach high temperatures, especially the cathode insulator and the cathode/heater surfaces. All hot surfaces may remain hot for an extended time after the tube is shut off. To prevent serious burns, take care to prevent and avoid any bodily contact with these surfaces both during and for a reasonable cool-down period after tube operation.

W6BHZ To-Do

- ~~fix generator~~
- ~~complete cabinet~~ - weld
 - paint
 - cork
- move / throw out old minor stuff
- ~~find Fluke 83~~
- ~~find soldering iron~~
- fix antenna raise/lower motor
- replace antenna rotor and add Brake release band to controller
- ~~get printer hooked up to computer~~
- + IRLP test
- Alumni Donation Thank-You letters
- Send in Service monitor for repair
- ~~Filing cabinet~~
- ~~BBQ brush & forks~~
- + Wax floors
- ~~fix break at Sander~~
- Install horizontal antenna supports (wall-mount, red)
- Mount wildflower Plaques
- add resistor to IC-2710's for voice
- ~~water proof coke cabinet~~
- remove blinds on right window - sell +? value R Up there
- weld top of tower
- ~~Buy popo toilet toilet and mount~~
- 9V battery for fluke multimeter
- Plaque for alumni on repeater
- FT-920 Cables
- ~~Clear windows~~

Solution $x = \cos(3t) - \cos(5t)$

K6AVC, Gordon STARTS, AS CHIEF ENGINEER —
Hans) of Radio Voice Of Poly on 730 KHz AM
40 WATTS TO A RCA 807 TUBE — X101 CONTROL

Test Run Scheduled Tonight For Student Radio Station

The trial run of what may be Cal Poly's own student closed-circuit radio station is set tonight for 8:30 p.m.

Gordon Browning, electronics junior, is spearheading the project. He plans to go on the air tonight at 730 kcs on the dial and will probably play music for the first part of the test and begin voice transmission about 9 p.m.

Branded Station R V O P (Radio Voice of Poly), much student interest is being aroused on campus about the project. College Union officials are discussing arrangements to handle R V O P programming should the tests be successful. Other comments have indicated a desire to keep it out of the already activity-jammed College Union.

Student Affairs Council, meeting in regular session tonight, will tune 730 kcs during the evening. EL MUSTANG is taking part by collecting information on the test's success. All students hearing the trial run have been urged to drop in at the paper's office, Adm. 21, and tell the editors, "I heard the broadcast." Only in this way can the real success of R V O P be predicted.

Activities Officer Dan Lawson said "R V O P offers tremendous possibilities for the students." Faculty advisorship has already been offered R V O P.

EL MUSTANG 57 or 58

SEE ALSO EC RODEO 1958

BS EL JUNE 1958



W6BHZ Loan List

"Do Not Take, Borrow"



WCBHZ Loan List

"Do Not Take, Borrow"

W6BHZ Loan List

"Do Not Take, Borrow"



W6BHZ Loan List

"Do Not Take, Borrow"



GREETINGS FROM

RAY JENSON

W6GWI

(GREAT WHISKY INHALER)

ALWAYS A FRIEND



2745 S. MONTEREY HWY.
SAN JOSE, CA. 95111
SPACE 10A.

Keep us Gay a secret...
Jim 453-7458 from KICK FC 5B

Ray Jensen, pianist at Shadowbrook

Toured with greats from big band era

By MACK LUNDSTROM

Mercury News Staff Writer

Nov. 26, 1912, Chicago, Ill.
Lays "ke" Ray Jensen refined his piano technique at the Juilliard School

of Music, toured with big names in big bands during the Depression, entertained the troops stateside during World War II and played the Hollywood scene.

But if Monterey Bay area diners caught his act during the past four decades, they would have heard strains of a much earlier era.

Mr. Jensen was a student of the style of the pianist and composer Scott Joplin, whose "Maple Leaf Rag" became a classic of ragtime around the turn of the century and whose music was rejuvenated in the movie "The Sting" during the '70s.

Ray Jensen played his piano all over Monterey from the '50s to



■ **Born:** Nov. 28, 1912, Chicago, Ill.
■ **Died:** Nov. 26, 1997, Santa Clara, Calif. ■ **Survived** by: Companion, Irene Lytle of San Jose; sisters, Attene Plunkett of Lakehurst, N.J., Faye Jensen of Austin, Texas; son, Earl Jr. of Lynhurst, N.J.
■ **Services:** None, at Mr. Jensen's request. ■ **Memorial:** Donations may be made to the American Cancer Society, 1715 S. Bascom Ave., Suite 100, Campbell, Calif. 95008.

In the '70s, "If you were in the business, a customer, an employee, you were comfortable with Ray. He walked that fine line of being a character and a person who was respected."

Mr. Jensen engaged his customers in the good-natured manner of the piano bar, Burke said, and he had a following. But Burke remembers the theater-quality color home movies Mr. Jensen used to show to employees. "We'd shut down the restaurant on Sunday evenings, and Ray would show his times in the film industry down south."

Mr. Jensen had ended up in the Los Angeles Basin during and following World War II, when he had been assigned to piano duty for the duration.

In the '30s, he had played for Buddy Rogers, the big band that played "the newest thing in swing," with names like drummer Gene Krupa. He also played with the orchestra of Larry Clin-

ton, who as a composer earlier had made Tommy Dorsey renditions such as "The Dipsy Doodle" hits.

Earl Melville "Ray" Jensen was born in Chicago and took piano lessons before enrolling at the Juilliard School. As a jazzman, he caught the ear of San Francisco Chronicle columnist Herb Caen, who allowed as how Ray Jensen had one of the best left hands in the business.

Mr. Jensen married and divorced, and when he moved to San Jose in the '70s, he met Irene Lytle at the Three Flames restaurant one night. They shared life together for 15 years.

Before and after he retired in 1991, Mr. Jensen painted portraits in oil and sold a few and wrote short stories, Lytle said. He had smoked for many years and contracted lung cancer.

He died in a Santa Clara nursing home Nov. 26, two days shy of his 85th birthday.

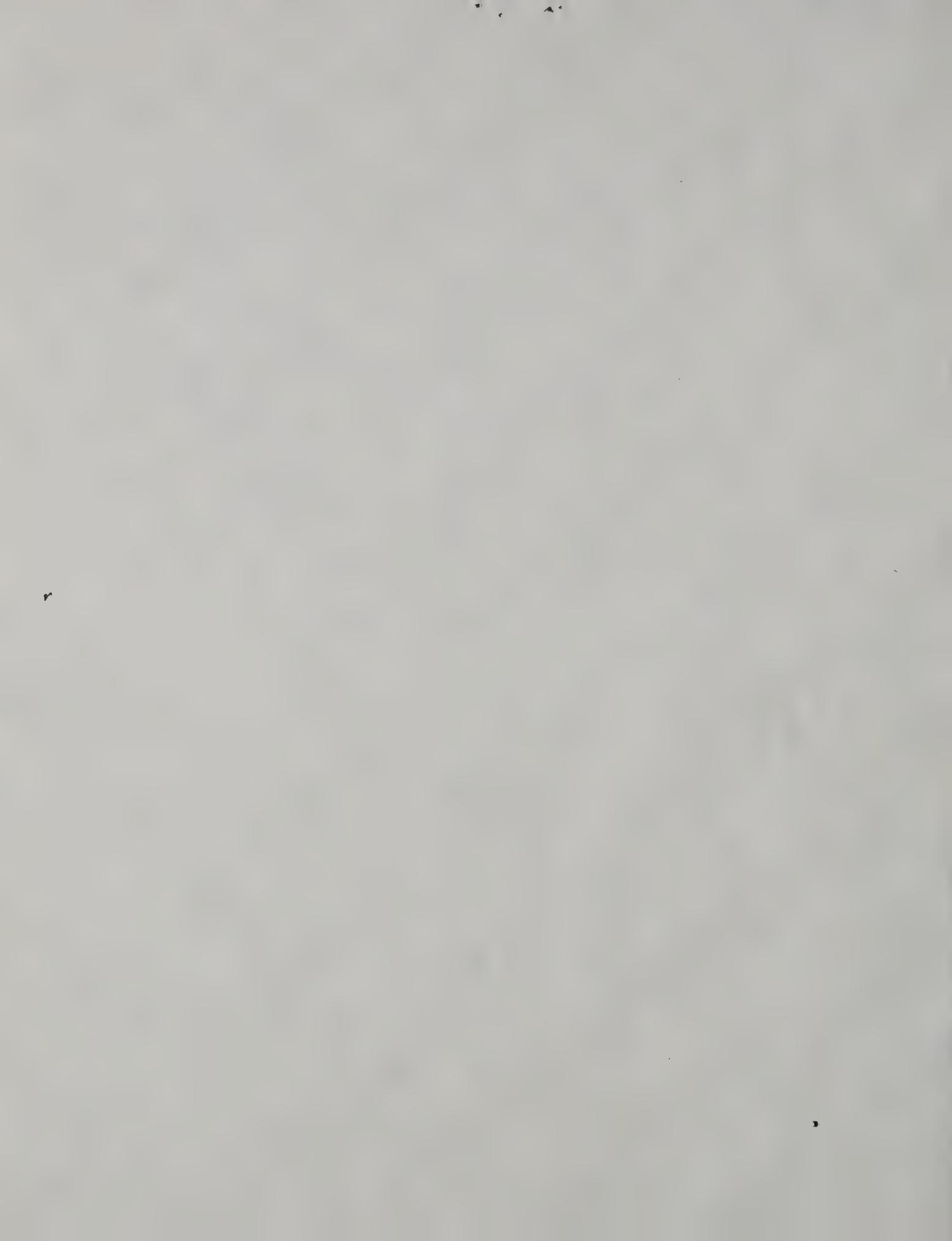


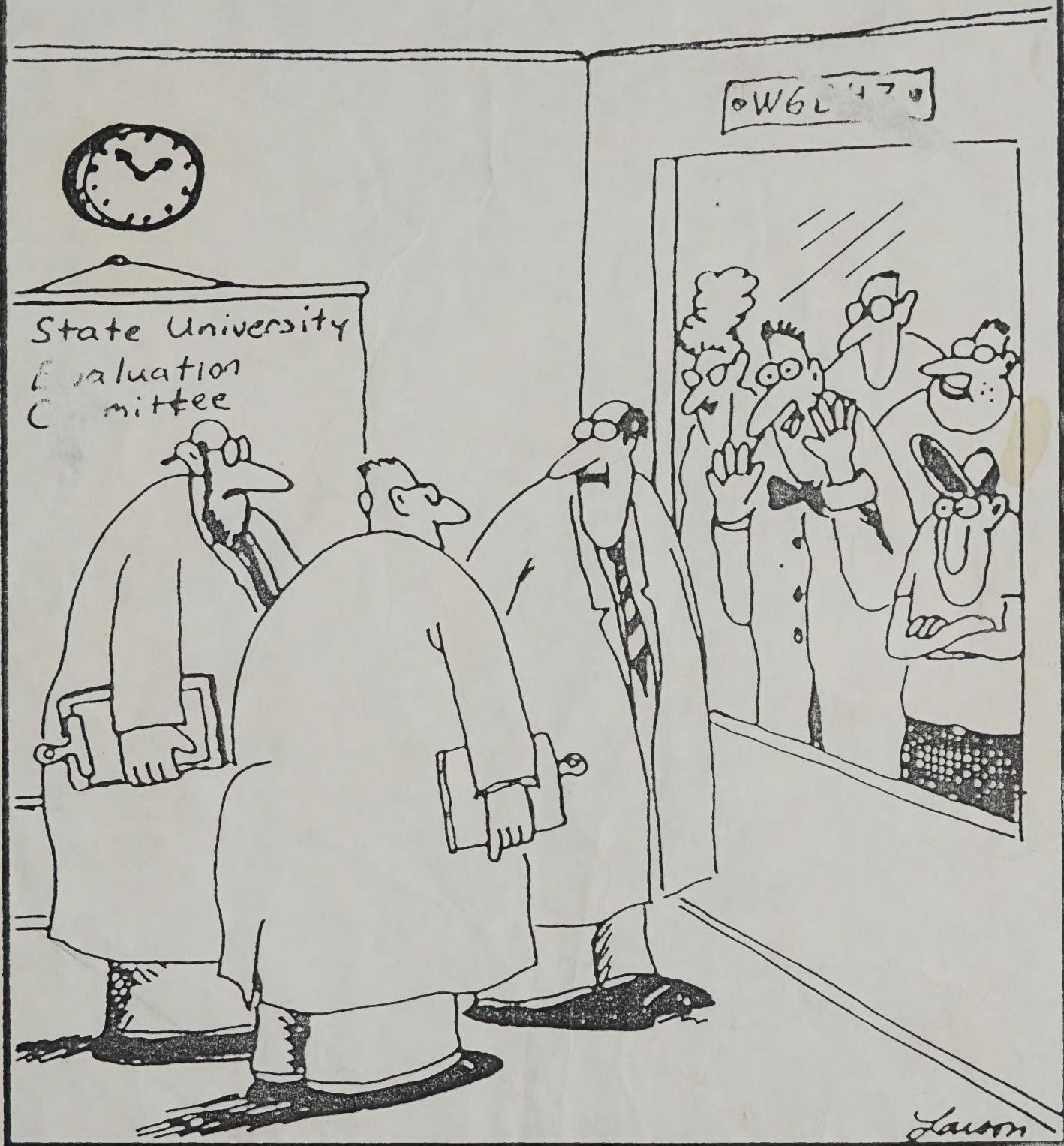


Fig. 1-16 Wrong position of microphone: too far from mouth



Fig. 1-17 Correct position of microphone: proper distance from mouth

1983



"Yes, they're all fools, gentlemen. ... But the question remains, 'What kind of fools are they?'"

